

ENSV Inspection Transmittal Summary Report

Media: RCRA	Inspection Type: CEI	Inspection Date: 09/29/2010	Preliminary SNC Findings: No NOV / NOPV / NOPF: Yes
Inspector: DAVE WHITING		Transmittal Date:	

Facility Name:
Climax Molybdenum

Address:
2598 Highway 61
Fort Madison
IA
52627

ID Number:
IAD000222653

Activity Number: **MM Participating Programs:**

Federal Activity:

Federal Facility:
No

Potential EJ:
No

SBREFA Provided: Yes	Security Handout Provided: Yes	MM Screening Completed: Yes	EMS ISO 14001: No	Compliance Officer: JAMES AYCOCK
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Selection Criteria 1:
Mineral Processor

Selection Criteria 2:

ACS Code:

Inspection Findings:

- 1) Inadequate hazardous waste determination on motor pool sump pit sludge
- 2) Used oil tank fill pipe not marked "used oil"

Comments:

Target Quality:

Good - found out Climax does not have processes of concern as alleged by Freeport.

RCRA



559650

REPORT OF RCRA COMPLIANCE INSPECTION

At

CLIMAX MOLYBDENUM COMPANY

2598 Highway 61

Fort Madison, IA 52627

Phone No.: (319) 463-2224

EPA I.D. NUMBER: IAD000222653

On

September 28-29, 2010

By

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region VII

Environmental Services Division

INTRODUCTION

At the request of the Air and Waste Management Division (AWMD), a RCRA Compliance Evaluation Inspection (CEI) was performed at Climax Molybdenum Co. in Fort Madison, IA on September 28-29, 2010. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended. The inspection was a Level B Multi-Media Inspection. A Multi-Media Screening checklist is attached to this report (attachment 1). This narrative report and attachments present the results of the CEI.

PARTICIPANTS

Climax Molybdenum Co. (Climax):

Scott Ickes, Manager of Q.A. & Environmental Affairs

Joe Bartholomew, Environmental Technician

Kelley Deen, Environmental Technician

Gary Glasgow, Plant Manager

David Daggs, Maintenance Supervisor

Darin Oberman, Acid Plant Lead

Brian Meiercotto, Maintenance General Supervisor

U.S. Environmental Protection Agency (EPA):

David N. Whiting, Environmental Engineer

Jim Aycock, RCRA Enforcement/Compliance Officer

INSPECTION PROCEDURE

Upon arrival at Climax, Mr. Aycock and I contacted Mr. Ickes and presented him our credentials. I explained to Mr. Ickes the purpose of the CEI and the procedure I would follow. I explained to Mr. Ickes my need to collect accurate information and left with him a copy of U.S. Federal Code Sections 1001 & 1002. The inspection consisted of a discussion of facility operations and waste management practices, a review of pertinent documents, and a visual inspection of waste management areas and several buildings on the property. Mr. Aycock and I were accompanied by Mr. Ickes, Mr. Bartholomew and Ms. Deen during the visual examination. Most compliance information was obtained from these three people, although some compliance information was obtained from the other participants in the CEI. Information collected during the CEI is recorded on data gathering sheets which are referenced in the report. Photographs taken during the CEI are attached as inspection documentation (attachment 18). A photo log is included (attachment 17). At the conclusion of the inspection I had an exit briefing with Mr. Ickes, Mr. Bartholomew and Ms. Deen. During the exit briefing, Mr. Ickes acknowledged receipt of the following by his signature: a Notice of Violation, an Inspection Confidentiality Notice and a Receipt for Documents (attachments 2-3). No claim for confidential treatment of information was made during the CEI.

FACILITY DESCRIPTION

Climax extracts molybdenum (moly) by refining ore concentrates supplied by mines. Climax gets ore from two primary mines in Colorado, where molybdenum is the sole product of the mining operation. Ore containing moly also can be acquired as a by-product from copper mines. Climax gets substantial amounts of molybdenum from the Sierrita and Bagdad copper mines in Arizona. The mines are owned by Freeport-McMoRan Copper & Gold Inc., of which Climax is a subsidiary. Mining, crushing, grinding and flotation are the four main steps in producing ore concentrate at the mines. At Climax, the ore concentrate is roasted during the refining process. The roasting process produces a technical grade oxide, which is the ingredient for molybdenum oxide powder and carbon-free briquettes. The technical grade oxide can undergo further refining for chemical grade applications.

Ex. 4 - CBI

A more detailed description of Climax processes is contained in a 3007 Response Document located in the EPA Confidential Business Information file.

Climax started up operations in 1977 and expanded the facility in 1995. Climax is located in a rural industrial area south of Fort Madison. Climax owns about 700 acres and has a developed industrial plant occupying about 75 acres (attachment 6). About 135 employees staff operations 24 hours per day seven days per week.

RCRA Status

Climax has submitted notification to EPA and identified their generator status as a conditionally exempt small quantity generator (CESQG) of hazardous waste. I was able to verify that Climax is a CESQG during this CEI. Climax has generated an average of about 30 pounds of hazardous waste per month, during the last 16 months. I inspected Climax as an CESQG. Climax is also used oil generator and a small quantity handler of universal waste.

FINDINGS AND OBSERVATIONS

Climax was previously inspected by EPA on August 22, 2006. At the time of that CEI, two waste streams were identified as needing a hazardous waste determination. The two wastes were the maintenance building dust collector waste and the spent parts washer fluid (water based). The facility determined these two wastes are non-hazardous by testing. I did not locate the test results in EPA file information. I requested a copy of the test results for the two wastes, during this CEI (attachment 7). The test results show the wastes were non-hazardous for metals by toxicity characteristic leaching procedure.

Climax is not conducting any recycling activity or managing any waste under the definition of solid waste final rule, which became effective in Iowa at the end of December 2008.

Climax is ISO 14001 certified (attachment 8).

Wastes

Spent solvent is generated from sample testing in the quality control lab (attachment 16 page 5). The spent solvent is primarily acetone and contains small amounts of butonal, isopropanol and methyl ethyl ketone. The facility has determined that the spent solvent is an ignitable hazardous waste, D001, and a listed hazardous waste, F003 and U002, based upon materials used and process knowledge. The spent solvent is shipped to Clean Harbors Recycling Services of Ohio, LLC in Hebron, OH for solvent recovery (attachment 9). About ten pounds per month of spent solvent are generated. Lab personnel maintain a spent solvent generation log (attachment 10). The spent solvent

is accumulated in a 30-gallon drum inside a flammable cabinet, which is directly outside of the quality control lab (attachment 16 page 6). The drum was closed, marked, dated 05/27/09 and about two-thirds full.

Periodic non-routine hazardous waste has been generated twice during the last three years (attachment 16 page 5). A hazardous waste determination was made on the wastes by the facility when they were generated. About 0.5 pounds of discarded lab chemicals were shipped off-site in March 2008 and about 220 pounds of lead sulfate waste was shipped off-site in June 2010 (attachment 11).

Paint related waste is generated from painting by maintenance personnel and from puncturing spray cans used in maintenance painting (attachment 16 page 5). The facility has determined that the paint related waste is an ignitable hazardous waste, D001, a toxicity characteristic hazardous waste, D008, and a listed hazardous waste, F003 and F005, based upon materials used and process knowledge. The paint related waste is accumulated in one 30-gallon drum in the maintenance shop (attachment 16 page 6). The drum was closed, marked, dated 08/30/06 and about three-fourths full.

Used oil is generated from the molysulfide process and maintenance on equipment and vehicles (attachment 16 pages 7-8). The amount of used oil generated is about 1,150 gallons per month, the vast majority of which is from the molysulfide process. The molysulfide used oil is accumulated in one above ground tank (attachment 12). Used oil from equipment and vehicle maintenance is stored in a 55-gallon drum in the motor pool. Both the tank and the drum were marked "used oil." The used oil is collected by Future Environmental, Inc. (Future) in Peoria, IL for recycling (attachment 13).

Used oil filters from maintenance are drained and crushed before disposal.

At the time of the CEI, Mr. Ickes and Mr. Bartholomew described to me that the motor pool has a wash area above an inground sump. The sump has an overflow pipe to an inground tank (attachment 18, photos 1-2). The piping schematic for the sump and the inground overflow tank shows their capacity to be 55 gallons each. I was told that the inground overflow tank received oily wastewater from the sump, and that it was collected as "wastewater" by Future (attachment 13, pages 2-3). Records show that Future collects 200 to 300 gallons of "wastewater" every two months. I determined that the in ground overflow tank was accumulating used oil and the overflow pipe in the sump was not marked "used oil" to indicate that it was a used oil fill pipe. This is a violation of 40 CFR 279.22(c) (**NOV #1**).

At the time of the CEI, Mr. Ickes and Mr. Bartholomew said that the motor pool sump sludge was removed about once each year and added to the feedstock of the roasters. Mr. Bartholomew and Mr. Ickes did not know the quantity of sump sludge generated. Mr. Ickes acknowledged that no formal hazardous waste determination had been made on the sump sludge (attachment 16 page 8). I determined that this was an inadequate hazardous waste determination and a violation of 40 CFR 262.11 (**NOV #2**).

Universal waste includes spent fluorescent lamps (4-foot and 8-foot), spent high intensity discharge (HID) lamps and used batteries (attachment 16 pages 9-10). Records review show that the average monthly generation rates of universal waste are as follows: 50 4-foot lamps, 15 8-foot lamps, 12 HID lamps and 8 pounds of batteries. The universal waste is collected for recycling by A-Tec Recycling, Inc. in Des Moines, IA (attachment 14). The universal wastes are stored in the domestic wastewater treatment building. All of the containers of universal waste were closed, marked and dated.

Wastewater sludges are generated from operation of two different treatment systems; one for domestic wastewater and one for process wastewater (attachment 14). Effluent from the wastewater treatment systems is discharged under an NPDES permit. Mr. Ickes said that they have made application for renewal of the permit. The facility has determined that the sludges from wastewater treatment are a non-hazardous waste, based upon process knowledge and testing. The domestic wastewater treatment system treats about 3,000 gallons of wastewater each day. Sludge is generated in the amount of about 2,000 pounds every three months, and is disposed at the City of Keokuk publically owned treatment works. The process wastewater treatment system treats about 300,000 gallons each day. Sludge is dredged from settling ponds once every two years and disposed at a permitted landfill owned by Climax. The amount of sludge removed for disposal is about 4,000 tons every two years. Mr. Aycock and I viewed the landfill near Argyle, IA on 09/29/10. The landfill has a leachate collection system. Ms. Deen said that the collected leachate is periodically pumped out and returned to the process wastewater treatment system at Climax.

SUMMARY

At the exit interview we discussed the violations cited and the desirability of a Climax representative to respond to the cited violations, in writing, within 14 days. I recommended to Mr. Ickes that a Climax representative visit locations and companies that recycle or dispose of wastes shipped off-site from Climax. I suggested this as a best management practice and not out of any particular concern about the facilities chosen for recycling, treatment or disposal of wastes.



David N. Whiting
Environmental Engineer

Date: 10/21/10

Attachments

1. Region VII multi-media screening checklist (2 pages)
2. Notice of Violation (1 page)
3. Confidentiality Notice (1 page)
4. Receipt for Samples and Documents (1 page)
5. Acid plant process documents (6 pages)
6. Facility diagram and aerial photo (2 pages)
7. Waste test results (3 pages)
8. ISO 14001 certification (1 page)
9. Spent solvent manifest and LDR notice (6 pages)
10. Spent solvent lab log (3 pages)
11. Periodic waste manifests and LDR notices (14 pages)
12. SPCC plan, excerpt (4 pages)
13. Used oil and wastewater collection documents (3 pages)
14. A-TEC invoices (5 pages)
15. Wastewater related documents (3 pages)
16. Inspection data gathering sheets (11 pages)
17. Photo log (1 page)
18. Photographs, 2 photos (1 page)

REGION VII MULTIMEDIA SCREENING CHECKLIST

Facility Name: Climax Molybdenum Co.
 Facility Ownership: same
 Street: 2598 Highway 61
 City: Fort Madison State: IA Zip: 52627
 Phone: (319) 463-2224 Facility Contact: Scott Jakes
 Number of Employees: 138 Work Hours/Shifts: 24/7 Facility Subject to OSHA regulations Yes ☒ No ☐

Inspector: David N. Whiting
 Primary Media: RCRA
 Inspector Phone Ext.: (319) 887-2618
 Date: 9/28/10
 SIC/NAICS Code: 331419

Main facility activity, major process chemical(s) & description: produce molybdates from moly bearing ore. produce sulfuric acid from roaster off-gas - Roasters (2), Chemical Refining, acid plant.

(Check all that apply): painting/coating (water-based ☐, solvent-based ☐) printing ☐ reacting ☒ formulating ☐ distilling ☐ water treatment ☒ refrigeration ☐ manufacturing ☐ parts washers/degreasing (water-based ☒, halogenated-based ☐, non-halogenated-based ☐) combustion (boiler, furnaces, oxidizers) ☐ plating (chrome ☐, other ☐).

ENVIRONMENTAL JUSTICE (Note: Forward to EJ if a concern is identified during your inspection)

1. Is the facility located in an apparent low income area (e.g., with many abandoned and dilapidated properties)? No ☒ (stop) Yes ☐
 If yes, is facility less than 1000 feet from nearest routinely occupied property (house, school, etc.)? No ☐ (stop) Yes ☐ Forward to EJ

EMERGENCY PLANNING & COMMUNITY RIGHT TO KNOW ACT (EPCRA) & TOXIC SUBSTANCE CONTROL ACT (TSCA)

1. Did facility file a Tier II report with fire department, Local & State Emergency Planning Committee? Yes ☒ No ☐ Forward to EPCRA
 2. Did facility manufacture, import, or process (formulate, blend, package) >25,000 lbs of a chemical or >100 lbs of a Persistent Bioaccumulative Toxin (lead, mercury, or polycyclic aromatic compounds) at any time over the last 5 years? No ☐ (stop) Yes ☒ Forward to EPCRA
 3. Has the facility: If any box in question 3 is marked - Forward to EPCRA
 a. Stored ≥500 lbs of ammonia ☒, ≥100 lbs of chlorine ☐, or ≥10,000 lbs of an industrial chemical ☒ at any time over the last 2 years? ☐
 b. Stored ≥10,000 lbs of pressurized flammable material (propane, methane, butane, pentane, etc.) at any time over the last 2 years? ☐
 c. Used ≥10,000 lbs of ammonia ☒, chlorine ☐, halogenated solvents ☐, solvent-based paints ☐, or solvents ☐, or nitrated compound, over the last calendar year? ☐
 d. Generated ≥ one half pound of metal dusts, fumes, or metal turnings, over the last calendar year? ☐
 4. Does the facility have any oil filled electrical equipment? No ☐ (stop) Yes ☒ Forward to TSCA and ask Has facility tested oil filled equipment to determine PCB content? No ☐ Yes ☒ number containing PCBs greater than 50 ppm 0 and percent of all equipment tested 100% Is equipment leaking (including wet or weeping equipment)? No ☐ Yes ☐ - Get Photo
none observed

CLEAN WATER ACT (CWA) - National Pollution Discharge Elimination System (NPDES), Industrial Pretreatment, Storm Water, & Wetlands

1. Does the facility discharge any wastewater to storm sewers, surface water, or the land? No ☐ (stop) Yes ☒
 If yes, are all wastewater discharges permitted? Yes ☒ No ☐ Forward to CWA
 2. Does the facility have process ~~wastewater~~ that are discharged to a city POTW (Publicly Owned Treatment Works)? No ☒ (stop) Yes ☐
 If yes, are the discharges permitted by: State? ☐ City? ☐ - If yes, Stop here. No ☐ Forward to CWA
 If yes, does the city have a state or EPA approved pretreatment program? Yes ☐ No or Don't Know ☐ Forward to CWA
 3. During rainfall events, can storm water carry pollutants from manufacturing, processing, storage, disposal, shipping and receiving areas, or from construction sites >1 acre, to storm sewers or surface water? No ☐ (stop) Yes ☒
 If yes, does the facility have an NPDES permit for these storm water discharges? Yes ☒ No ☐ Forward to CWA
 4. Did you see any wastewater discharges not identified by the facility? No ☐ (stop) Yes ☐ - Identify location, time, appearance of discharge: outfall to Mississippi River none observed (Get Photo) Forward to CWA
 5. Does the facility have any wetland areas (e.g. streams, ponds, or temporarily wet areas)? No ☐ (stop) Yes ☒
 If yes, have any wetland areas been dredged, filled, channeled, dammed, or had gravel removed from them within the last 5 years? No ☒ (stop) Yes ☐ - Identify location and timeframe (Get Photo) FWD to Wetlands

SAFE DRINKING WATER ACT (SDWA) - Underground Injection Control (UIC) & Public Water System (PWS)

1. Does facility discharge any liquids to the subsurface (septic systems, disposal wells, cesspools, etc.)? No ☒ (stop) Yes ☐ Forward to UIC
If yes, do these liquid wastes consist of sanitary wastewater only? Yes ☐ No ☐
2. Does facility provide drinking water to 25 people or more from its own source (private well, pond, etc.)? No ☐ (stop) Yes ☒ Forward to PWS
If yes, does the facility test or monitor its drinking water in order to comply with state regulations? Yes ☒ No ☐

CLEAN AIR ACT (CAA) and CFCs

1. Do you see any dense, non-steam, smoke or dust emissions leaving the facility property? No ☒ Yes ☐ Forward to CAA
Source _____ (Get Photo)
2. Does the facility have any new air pollution emitting equipment that was constructed or installed in the past 5 years? No ☐ (stop) Yes ☒
If yes, is equipment permitted? Yes ☒ No ☐ Forward to CAA Describe: baghouses, acid plant components
electrostatic precip moly sulfide cleaner
3. Does the facility have any cooling units that contain >50 lbs of refrigerant? No ☐ (stop) Yes ☒ Forward to CFC
If yes, are these units: Self-serviced? ☐ Contract Serviced? ☒ - Service Company: Millard Fr. Madison
4. Does the facility have a refrigeration process that contains more than 10,000 lbs of ammonia? No ☒ (stop) Yes ☐ Forward to EPCRA/RMP
5. Does the facility service motor vehicle air conditioning systems? No ☒ (stop) Yes ☐ Forward to CFC

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) and UNDERGROUND STORAGE TANKS (UST)

1. Does the facility generate more than 30-gallons (220 lbs./100kg) of hazardous waste per month or at any one time? No ☐ (stop) Yes ☐
If yes, does facility have an EPA Hazardous Waste Identification Number? Yes ☐ (stop) No ☐ Forward to RCRA
2. Is hazardous waste treated ☐, stored >90-days ☐, burned ☐, land filled ☐, put in surface impoundments ☐ or waste piles ☐?
No ☐ (stop) Yes ☐ If yes, is the facility permitted for above described activity? Yes ☐ No ☐ Forward to RCRA
3. Did you see or does the facility have any large quantities of materials that the facility claims to be non-hazardous waste material (>10 drums, roll-offs, waste piles, etc. - exclude clean office trash, cardboard, & packaging type wastes)? No ☐ (stop) Yes ☐
Material Claimed To Be Non-Hazardous process How does the facility know these wastes are non-hazardous?
~4,000 Dry tons / 2 yr. WWS sludge Testing, industry or manuf. info., MSDS, etc. ☒; None available ☐ Forward to RCRA
~2,000 lb. / 3 mo. domestic WWS sludge Testing, industry or manuf. info., MSDS, etc. ☐; None available ☐ Forward to RCRA
Testing, industry or manuf. info., MSDS, etc. ☐; None available ☐ Forward to RCRA
process sludge is disposed in SDP Testing, industry or manuf. info., MSDS, etc. ☐; None available ☐ Forward to RCRA
domestic sludge taken to Keokuk POTW Testing, industry or manuf. info., MSDS, etc. ☐; None available ☐ Forward to RCRA
4. Did you see any leaking hazardous waste containers, drums, or tanks? No ☒ Yes ☐ Forward to RCRA
Describe: _____ (Get Photo)
5. Did you see any signs of spills or releases (e.g., dead or stressed vegetation, stains, discoloration)? No ☒ Yes ☐ Forward to RCRA
Describe: _____ (Get Photo)
6. Did you see any chemical or waste handling practices that concern you (access to children/public)? No ☒ Yes ☐ Forward to RCRA & EPCRA Describe: _____ (Get Photo)
7. Does the facility have any past or present underground petroleum product or hazardous material tanks? No ☒ Yes ☐ Forward to UST
8. Does the facility have any underground fuel tanks for emergency generators? No ☒ Yes ☐ Forward to UST

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)

1. Does the facility have any aboveground oil tanks (petroleum, synthetic, animal, fish, vegetable), with an aggregate volume >1,320 gallons?
No ☐ (stop) Yes ☒ - Does the facility have a certified SPCC Plan? Yes ☒ No ☐ Forward to SPCC
If yes, are there secondary containment systems for the tanks? Yes ☒ No ☐ Forward to SPCC
If yes, are any tanks leaking where oil could reach waters of the State or U.S.? No ☒ Yes ☐ (Get Photo) Forward to SPCC

ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

1. Does your facility have an EMS? No ☒ Yes ☒
2. Is the facility's EMS ISO 14001 certified? No ☒ Yes ☐

*** PLEASE TAKE PHOTOS TO DOCUMENT POTENTIAL PROBLEMS**

Notice of Violation Pursuant to Requirements
of the Resource Conservation and Recovery Act (RCRA)

TO: Facility Name: Climax Molybdenum Company
Address: 2598 Highway 61
Fort Madison, IA 52627
EPA ID Number: IAD000222653 Date: 9/29/10

This notice is provided to call your attention to the following areas of noncompliance with state and federal regulations. This notice does not constitute a compliance order (Administrative Civil Complaint) pursuant to Section 3008 of RCRA and may not be a complete listing of all violations resulting from the the inspection.

Citation	Description of Violation
<u>40 CFR 279.22(c)</u>	<u>Used oil fill pipes not marked "used oil."</u>
<u>40 CFR 262.11</u>	<u>Potential inadequate hazardous waste</u>
<u>40 CFR 262.11(a)(2)</u>	<u>determination on motor pool sludge.</u>

You are requested to submit a written response within **14 calendar days** of receipt of this notice. Your response should include a description of all corrective actions taken and/or a schedule for completing the necessary corrective actions. The response should be submitted to:

U. S. Environmental Protection Agency, Region VII
David M. Whiting
922 Walnut St.
June City, IA 52240
ATTN. _____

If you have any questions about this Notice or wish to discuss your response, you may call me at
(319) 237-2618, or Jim Aycock (Compliance Officer) at
(913) 551-7887.

This Notice prepared by David M. Whiting Date: 9/29/10

The undersigned person acknowledges that he/she has received a copy of this Notice and has read same.

Printed Name: Scott Ickes Date: 9/29/10
Signature: [Signature]
Title: Mgr. of QA and Environmental Affairs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CONFIDENTIALITY NOTICE

Facility Name <i>Climax Molybdenum Company</i>	
Facility Address <i>2598 Highway 61 Fort Madison, IA 52627</i>	
Inspector (print) <i>David N. Whiting</i>	
U.S. EPA, Region VII, 901 N. 5th St., Kansas City, KS 66101	Date <i>9/29/10</i>

The United States Environmental Protection Agency (EPA) is obligated, under the Freedom of Information Act, to release information collected during inspections to persons who submit requests for that information. The Freedom of Information Act does, however, have provisions that allow EPA to withhold certain confidential business information from public disclosure. To claim protection for information gathered during this inspection you must request that the information be held CONFIDENTIAL and substantiate your claim in writing by demonstrating that the information meets the requirements in 40 CFR 2, Subpart B. The following criteria in Subpart B must be met:

1. Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.
2. No statute specifically requires disclosure of the information.
3. Disclosure of the information would cause substantial harm to your company's competitive position.

Information that you claim confidential will be held as such pending a determination of applicability by EPA.

I have received this Notice and <u>DO NOT</u> want to make a claim of confidentiality at this time.	
Facility Representative Provided Notice (print) <i>Scott Ickes</i>	Signature/Date <i>[Signature]</i> <i>9/29/10</i>

I have received this Notice and <u>DO</u> want to make a claim of confidentiality.	
Facility Representative Provided Notice (print)	Signature/Date

Information for which confidential treatment is requested:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RECEIPT FOR DOCUMENTS AND SAMPLES

Facility Name <i>Climax Molybdenum Company</i>
Facility Address <i>2598 Highway 61 Fort Madison, IA 52627</i>

Documents Collected? YES___ (list below) NO___

Samples Collected? YES___ (list below) NO___ Split Samples: YES___ NO___

Documents/Samples were: 1)Received no charge___ 2)Borrowed___ 3)Purchased___

Amount Paid: \$___ Method: Cash___ Voucher___ To Be Billed___

The documents and samples described below were collected in connection with the administration and enforcement of the applicable statute under which the information is obtained.

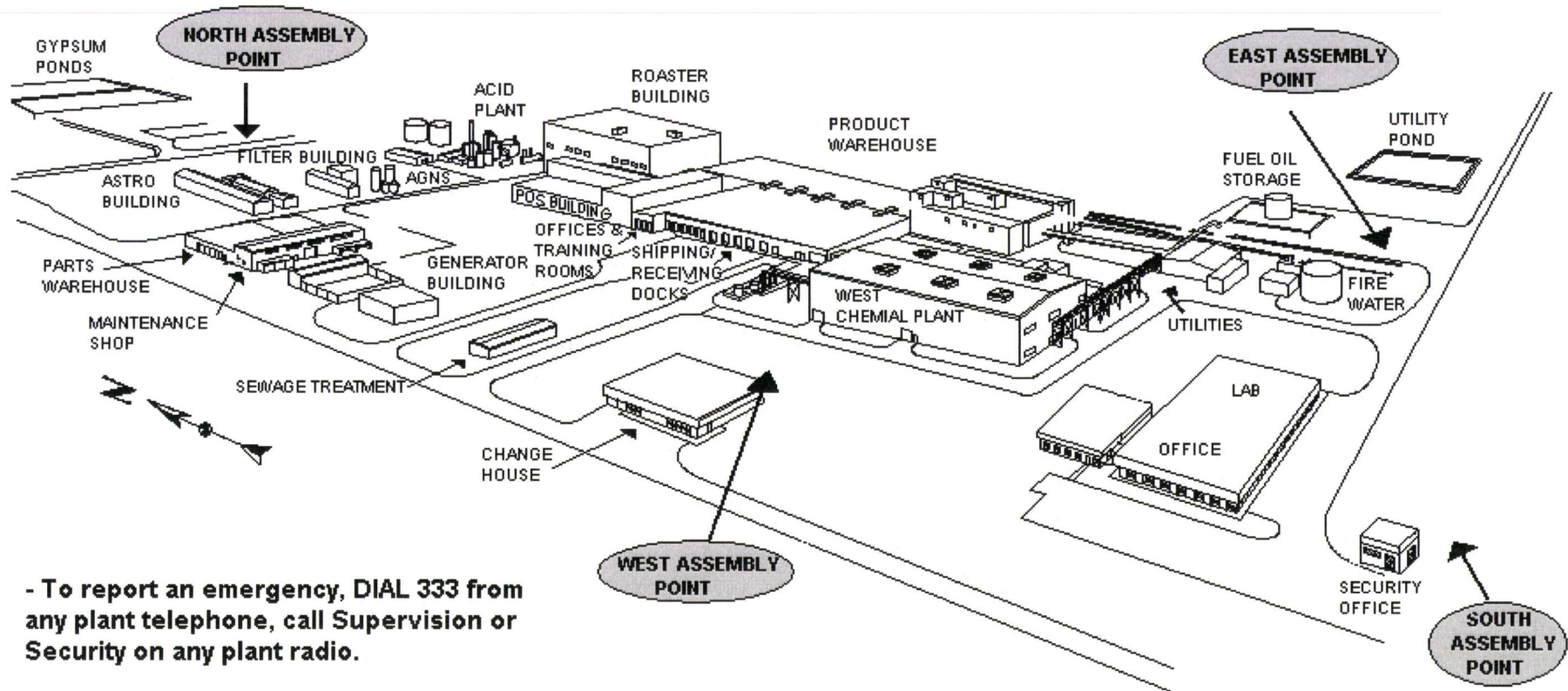
Receipt for the document(s) and/or sample(s) described below is hereby acknowledged:

- 1) Facility diagram (1 page)
- 2) EMS Audit, excerpt cover (1 page)
- 3) SDP permit, excerpt (1 page)
- 4) NPDES, excerpt (2 pages)
- 5) Waste analysis (3 pages)
- 6) SPCC excerpt (4 pages)
- 7) Used oil records (3 pages)
- 8) A-TEC records (5 pages)
- 9) Lab solvent log (3 pages)
- 10) Manifests + related records (20 pages)
- 11) Acid plant flowsheet (1 page)
- 12) Process description (2 pages)
- 13) Composite acid analytical (2 pages)

Facility Representative (print) <i>Scott Ickes</i>	Signature/Date <i>[Signature]</i> 9/29/10
Inspector (print) <i>David N. Whiting</i>	Signature/Date <i>[Signature]</i> 9/29/10
U.S. EPA, Region VII, 901 N. 5th Street, Kansas City, KS 66101	

(rev: 1/20/93)

CLIMAX MOLYBDENUM FORT MADISON, IA



- To report an emergency, DIAL 333 from any plant telephone, call Supervision or Security on any plant radio.

- Report any incident or injury to your Climax host immediately.

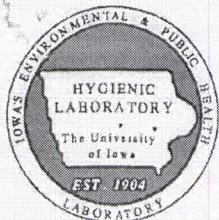
- In the plant you may encounter smells or odors from the process such as ammonia and sulfur. If the smell becomes irritating to you leave the area (notify your host) and proceed upwind away from the odor.

Google maps Address

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Hygienic Laboratory

The University of Iowa

Date of report: 11-30-2005

|||||
JOE BARTHOLOMEW
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
PO BOX 220
FORT MADISON IA 52627

Sample Number	200567257
Date Received	11-02-2005
Project	
Date Collected	11-01-2005 13:00
Collection Site	climax molybdenum co.
Collection Town	Fort Madison
Description	waste
Reference	PARTS WASHER FLUID
Collector	BARTHOLOMEW JOE
Phone	(319) 463-2222
Purchase Order	F21593

Comments

Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.

Results of Analyses

Arsenic in Solid Sample

Analyte	Concentration mg/kg by dry wt	Quantitation Limit mg/kg by dry wt
Total Arsenic	<1.0	1.0

Date Analyzed: 11-28-2005

Method: EPA 6020

Analyst: SB

Verified: TAB

Barium in Solid Sample

Analyte	Concentration mg/kg as rec'd.	Quantitation Limit mg/kg as rec'd.
Total Barium	<5.0	5.0

Date Analyzed: 11-15-2005

Method: EPA 6010A

Analyst: DC

Verified: TAB

Cadmium in Solid Sample

Analyte	Concentration mg/kg as rec'd.	Quantitation Limit mg/kg as rec'd.
Total Cadmium	2.1	2.0

Date Analyzed: 11-15-2005

Method: EPA 6010A

Analyst: DC

Verified: TAB

Chromium in Solid Sample

Analyte	Concentration mg/kg as rec'd.	Quantitation Limit mg/kg as rec'd.
Total Chromium	<2.0	2.0

Date Analyzed: 11-15-2005

Method: EPA 6010A

Analyst: DC

Verified: TAB

Page 1 - Continued on next page

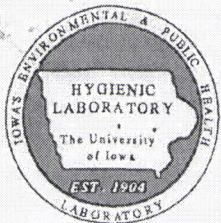
Mary J. R. Gilchrist, Ph.D.
Director

102 Oakdale Campus, #101 OH
Iowa City, Iowa 52242-5002
319/335-4500 Fax: 319/335-4555

<http://www.uhl.uiowa.edu>

Iowa Laboratories Complex
2220 S. Ankeny Blvd, Ankeny, Iowa 50023
515/725-1600 Fax: 515/725-1642

ATTACHMENT 7 Page 1 of 3



Hygienic Laboratory

The University of Iowa

Page 2
Sample Number 200567257

Lead in Solid Sample

Analyte	Concentration mg/kg by dry wt	Quantitation Limit mg/kg by dry wt
Total Lead	<1.0	1.0

Date Analyzed: 11-28-2005

Method: EPA 6020

Analyst: SB
Verified: TAB

Mercury in Solid Sample

Analyte	Concentration mg/kg as rec'd.	Quantitation Limit mg/kg as rec'd.
Total Mercury	<1.0	1.0

Date Analyzed: 11-10-2005

Method: EPA 7471A-UHL

Analyst: PJM
Verified: SB

Selenium in Solid Sample

Analyte	Concentration mg/kg by dry wt	Quantitation Limit mg/kg by dry wt
Total Selenium	<1.0	1.0

Date Analyzed: 11-28-2005

Method: EPA 6020

Analyst: SB
Verified: TAB

Silver in Solid Sample

Analyte	Concentration mg/kg by dry wt	Quantitation Limit mg/kg by dry wt
Total Silver	<1.0	1.0

Date Analyzed: 11-28-2005

Method: EPA 6020

Analyst: SB
Verified: TAB

Description of units used within this report

mg/kg by dry wt - Milligrams per Kilogram by Dry Weight

mg/kg as rec'd. - Milligrams per Kilogram as Received

Quant Limit - Lowest concentration reliably measured

Iowa Laboratory Certification No. 027. AIHA, NELAP, USEPA, NVLAP #101288-0 and other credentials available upon request.

If you have any questions please call Sherri Marine at 800/421-IOWA (4692) or 319/335-4500. Thank you.

Page 2 - End of Report

Mary J. R. Gilchrist, Ph.D.
Director

102 Oakdale Campus, #101 OH
Iowa City, Iowa 52242-5002
319/335-4500 Fax: 319/335-4555

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2220 S. Ankeny Blvd, Ankeny, Iowa 50023
515/725-1600 Fax: 515/725-1642

ATTACHMENT 7 Page 2 of 3



Hygienic Laboratory

The University of Iowa

Date of report: 09-28-2006

|||||

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
PO BOX 220
FORT MADISON IA 52627

Sample Number 200663790
Date Received 08-25-2006
Project
Date Collected 08-24-2006 06:00
Collection Site climax molybdenum co.
Collection Town Fort Madison
Description welding hood barrel
Reference
Collector BARTHOLOEW JOE
Phone (319) 463-2222
Purchase Order F21593

Comments Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.

Results of Analyses

TCLP Extraction

Analyte	Concentration pH Units	Quantitation Limit pH Units
Leachate pH	5.3	

Date Analyzed: 09-05-2006
Method: EPA 1311

Analyst: MC
Verified: LF

Toxicity Characteristic Leaching Procedure (TCLP)

Analyte	Leachate mg/L	Regulatory Level mg/L	Method	Analyst/ Verifier	Date Analyzed
Arsenic	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006
Barium	<10.0	100.0	EPA 1311/6020	SB/TAB	09-10-2006
Cadmium	<0.10	1.0	EPA 1311/6020	SB/TAB	09-10-2006
Chromium	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006
Lead	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006
Mercury	<0.02		EPA 1311/7471A	MP/SB	09-26-2006
Selenium	<0.10	1.0	EPA 1311/6020	SB/TAB	09-10-2006
Silver	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006

Description of units used within this report

mg/L - Milligrams per Liter
pH Units - pH Units
Quant Limit - Lowest concentration reliably measured

Iowa Laboratory Certification No. 027. AIHA, NELAP, USEPA, NVLAP #101288-0 and other credentials available upon request.

If you have any questions please call Sherri Marine at 800/421-IOWA (4692) or 319/335-4500. Thank you.

ADVANCED WASTE MANAGEMENT SYSTEMS, INC. (AWM)

ISO 14001 EMS Registration Service Audit Report (ES12)

Climax Molybdenum

Fort Madison, IA

December 8-10, 2009

6430 Hixson Pike, Chattanooga, TN 37343

Phone: (423) 843-2206

Fax: (423) 843-2310

mail@awm.net

http://www.awm.net

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <i>17-0306</i>	2. Page 1 of 2	3. Emergency Response Phone <i>(800) 483-3718</i>	4. Manifest Tracking Number <i>002588128 FLE</i>		
5. Generator's Name and Mailing Address <i>Climax Molybdenum 2590 Highway 61 South Fort Madison, IA 52627 Generator's Phone: (319) 463-2224</i>				Generator's Site Address (if different than mailing address) <i>SAME</i>			
6. Transporter 1 Company Name <i>Clean Harbors Environmental Services Inc</i>				U.S. EPA ID Number <i>MAD039322250</i>			
7. Transporter 2 Company Name <i>Clean Harbors Environmental Services Inc</i>				U.S. EPA ID Number <i>MAD039322250</i>			
8. Designated Facility Name and Site Address <i>Clean Harbors Recycling Services of Ohio, LLC 581 Milliken Drive SE Hobron, OH 43028 Facility's Phone: (740) 979-3532</i>				U.S. EPA ID Number <i>OH0980587364</i>			
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
	1. <i>UN1090. WASTE ACETONE. 3. PG II</i>			<i>DM 0140</i>		<i>P</i>	
14. Special Handling Instructions and Additional Information <i>1 CH268871 1130 ERG#127</i>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name <i>Joseph L. Bartholomew</i>				Signature <i>Joseph L. Bartholomew</i>		Month Day Year <i>05 26 09</i>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.				Port of entry/exit: Date leaving U.S.:			
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <i>Kyle Darsick</i>				Signature <i>Kyle Darsick</i>		Month Day Year <i>05 26 09</i>	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator) U.S. EPA ID Number							
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator) Month Day Year <i>06 23 09</i>							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. <i>H020</i>		2.		3.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name <i>James Phelan</i>				Signature <i>James Phelan</i>		Month Day Year <i>06 23 09</i>	

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

DESIGNATED FACILITY TO GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone (800) 483 7118	4. Manifest Tracking Number 002588128 FLE					
5. Generator's Name and Mailing Address Clean Harbor Environmental Services Inc 2504 Highway #1 South Fort Mill, SC 29507 Generator's Phone: (815) 402 2224				Generator's Site Address (if different than mailing address) SAME						
6. Transporter 1 Company Name Clean Harbor Environmental Services Inc				U.S. EPA ID Number MA0039322250						
7. Transporter 2 Company Name Clean Harbor Environmental Services Inc				U.S. EPA ID Number MA0039322250						
8. Designated Facility Name and Site Address Clean Harbor Recycling Services of Ohio, LLC 501 Milliken Drive SE Hudson, OH 44025 Facility's Phone: (440) 234 7870				U.S. EPA ID Number OH00380587404						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
1	1. HAZARDOUS WASTE ACETONE 3 PAH			001 DM 440		P		6001	6002	6003
	2.									
	3.									
	4.									
14. Special Handling Instructions and Additional Information 1. 00000001 2. 00000002 3. 00000003										
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Officer's Printed/Typed Name Joseph K. Bartholomew				Signature Joseph K. Bartholomew		Month Day Year 05 24 07				
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____										
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Signature Month Day Year Transporter 2 Printed/Typed Name Signature Month Day Year										
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number Facility's Phone: _____ 18c. Signature of Alternate Facility (or Generator) Month Day Year										
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H020 2. 3. 4.										
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year										



Land Disposal Restriction
Notification Form

Page : 1 of 1

Printed Date : May 22, 2009

MANIFEST INFORMATION

Generator : Climax Molybdenum

Address: 2598 Highway 61 South
Fort Madison, IA 52627

EPA ID #: 40CFR PART 761

Manifest Tracking Info.

002588128FLE

Sales Order No: 7Q2339138

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category
1.	1	CH368871	NON-WASTEWATER	2 (This is subject to LDR.)
EPA Waste Code			EPA Waste SubCategory	
D001			High TOC Ignitable Liquids	
F003U002			NONE	

Certification

Applies to
Manifest Line
Items

Pursuant to 40 CFR 268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268.

1.

Waste analysis data, where available, is attached.

Signature :

Joseph L. Bartholomew

Print Name

Joseph L. Bartholomew

Title :

ENVIRONMENTAL TECH.

Date :

26-MAY-2009

Used Solvent Log

Date	Solvent	Approximate Volume
11/2/08	Acetone Waste	3 L ES
12/29/08	Acetone Waste	5 4 L ES
1/13/09	2 ml Butonal; 60 ml methyl ketone	MRO
1/13/09	500 ml Acetone	ES
1/19/09	acetone waste	4 L MRO
2/2/09	acetone waste	4 L MRO
3/5/09	acetone waste	4 L ES
4/21/09	2 ml butonal; 60 ml methyl ketone	62 ml ML
5/18/09	3 L of acetone waste	3 L ML
8/5/09	4 L Acetone waste	4 L ML
8-12-09	2 ml butonal, 60 ml methyl ketone	62 ml ML
8-12-09	Acetone waste	4 L ML
9-1-09	4 L used acetone	4 L MRO
9/27/09	4 L used Butonal	4 L ML
10-9-09	2 ml Butonal 60 ml methyl Ketone	62 ml ML

Used Solvent Log

Date	Solvent	Approximate Volume
11/3/09	4L used Acetone	4L MRD
11/10/09	4L used acetone	4L MRD
1/6/10	Acetone	60 ml MRD
1/6/10	butonal	2 ml MRD
1/22/09 ¹⁰	4L used Acetone	4L ML
1/25/09 ¹⁰	Hexane	300ml ES
2/20/10	3L used acetone	3L MRD
4/21/10	3L used Acetone	3L MRD
5/4/10	4L Used Acetone	4L BW
5/12/10	300mls Alcohol	300mls mL
6/3/10	4L Used Acetone	4L DSP
6/30/10	4L used Acetone	4L MRD
7/7/10	4L used Acetone	4L BD
8-13-2010	ACETONE	1.7 L
8-13-2010	METHYL ETHYL KETONE (MEK)	50ml
8-13-2010	CYCLOHEXANONE	20 ml

UsedSol.xls

Used Solvent Log

Date	Solvent	Approximate Volume
8/31/10	acetone	4l MRD
9/28/10	isopropanol	2l MRD

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number 40CFR PART 761	2. Page 1 of 3	3. Emergency Response Phone (800) 483-3718	4. Manifest Tracking Number 001132110 FLE			
5. Generator's Name and Mailing Address Climax Molybdenum 2598 Highway 61 South Fort Madison, IA 52627			Generator's Site Address (if different than mailing address) SAME					
6. Transporter 1 Company Name Clean Harbors Environmental Services Inc			U.S. EPA ID Number MA0039322250					
7. Transporter 2 Company Name Clean Harbors Environmental Services Inc			U.S. EPA ID Number MA0039322250					
8. Designated Facility Name and Site Address Clean Harbors Deer Trail LLC 108555 East Highway 36 Deer Trail, CO 80105			U.S. EPA ID Number CO0991300464					
Facility's Phone: (970) 386-2293								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	1. UN1794, WASTE LEAD SULFATE, 8, PG II		002 DM		219	P	D008	
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information 1. CH402420 ERG#154 (2+55) 00191D								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offor's Printed/Typed Name X Kelly Dunn			Signature X Kelly Dunn			Month Day Year 06 28 10		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name GARY L OSCARSON			Signature Gary L Oscarson			Month Day Year 06 28 10		
Transporter 2 Printed/Typed Name Tim Olson			Signature Tim Olson			Month Day Year 6 29 10		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
Manifest Reference Number: _____								
18b. Alternate Facility (or Generator) U.S. EPA ID Number _____								
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems).								
1. H132			2.			3.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name Debra Phillabaum			Signature Debra Phillabaum			Month Day Year 7 12 10		

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY



Land Disposal Restriction
Notification Form

Page : 1 of 1

Printed Date : Jun 25, 2010

MANIFEST INFORMATION

Generator : Climax Molybdenum
Address: 2598 Highway 61 South
Fort Madison, IA 52627

Manifest Tracking Info.

001132110FLE

EPA ID #: 40CFR PART 761

Sales Order No: 7Q2943827

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category
1.	1	CH442430	NON-WASTEWATER	2 (This is subject to LDR.)
EPA Waste Code			EPA Waste SubCategory	
D008			Toxicity Characteristic for Lead	

Certification

Applies to
Manifest Line
Items

Pursuant to 40 CFR 268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268.

1.

Waste analysis data, where available, is attached.

Signature : _____ Print Name : _____
Title : _____ Date : _____

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number IAD000222653		2. Page 1 of 1	3. Emergency Response Phone (414) 236-1080		4. Manifest Tracking Number 001451231 JJK				
		5. Generator's Name and Mailing Address Climax Molybdenum 2598 Hwy 61 Ft. Madison, IA 52627 Generator's Phone: 319 483-2224		Generator's Site Address (if different than mailing address) Climax Molybdenum 2598 Hwy 61 Ft. Madison, IA 52627							
6. Transporter 1 Company Name ENVIROVAC WASTE TRANSPORT SYSTEMS		U.S. EPA ID Number I L R 0 0 0 1 9 5 8 8		7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address Badger Disposal of WI., Inc. 5611 W. Hemlock Street Milwaukee, WI 53223 Facility's Phone: (414) 760-9175		U.S. EPA ID Number W I D 9 8 8 5 8 0 0 5 6		9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type			
GENERATOR		X		1. WASTE Toxic solid, inorganic, n.o.s., (D004, P012, P105), (Contains Arsenic trioxide and Sodium azide). 6.1, UN3288, PG-II 5 gal DF		(D) C R D0008		P105			
14. Special Handling Instructions and Additional Information A: WS015117; Lab Pack #CM-01; (ERG #151) B: C: D:		Bill to: HET Consultants									
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name JOSEPH L. BARTHOLOMEW		Signature Joseph L. Bartholomew		Month 03		Day 12		Year 07			
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:									
17. Transporter Acknowledgment of Receipt of Materials		Transporter 1 Printed/Typed Name L. S. Sedy		Signature L. S. Sedy		Month 03		Day 13			
		Transporter 2 Printed/Typed Name		Signature		Month		Day			
18. Discrepancy		18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
		Manifest Reference Number:									
18b. Alternate Facility (or Generator)		U.S. EPA ID Number									
Facility's Phone:											
18c. Signature of Alternate Facility (or Generator)		Month		Day		Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)		1. H141 2. 3.									
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a		Printed/Typed Name Martin W. Schmit		Signature Martin W. Schmit		Month 3		Day 15			
						Year 08					

Badger Disposal of WI., Inc.

WID988580056

5611 W. Hemlock St.

Milwaukee, WI 53223

414/760-9175 FAX: 414/760-9189

Generator Name: Climax MolybdenumEPA ID#: IAD000222653Manifest Number: 001451231 JJK**Hazardous Waste Restricted from Land Disposal Certification**

Line item A (A, B, C or D) is subject to the land disposal restrictions of 40CFR Part 268. In accordance with 40CFR 268.7, this generator is providing notice that the waste does not meet the treatment standards specified in Part 268 Subpart D, or does not meet the prohibitions specified in 268.32 or RCRA section 3004 (d).

 The shipment contains F001 - F005 spent solvents (Complete Table A, page 2)

 The shipment contains other Land Disposal Restricted materials. List all US EPA hazardous waste codes that apply to this waste shipment. (Complete Table B, page 3) (D001 CMBST)

 The shipment contains F039 multi-source leachate, or D001 (DEACT), D002 (DEACT) waste prohibited under 40 CFR Section 268.37 or D012 through D043 waste prohibited under the revision to 40 CFR Section 268.48. (Complete Table B, page 3, and/or Table C, page 4)

 X The shipment contains labpacks (Complete Table D, page 6)

Waste Management. Using the following guidelines based on 40CFR 268.7, enter the appropriate letter in the "Management" column located on Table B.

- A. RESTRICTED WASTE REQUIRING FURTHER TREATMENT. This waste must be treated in the applicable treatment standards set forth in 40CFR part 266 subpart D, 268.32, or RCRA Section 3004(d). For "Hazardous Debris", this hazardous debris is subject to the alternative treatment standards of 40CFR 268.45.
- B. RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40CFR 268 subpart D, and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- C. RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS A SPECIFIED TECHNOLOGY AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY. "I certify under penalty of law that the waste has been treated in accordance with the requirements of 40CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- D. GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the non wastewater organic constituents have been treated by incineration in units operated in accordance with 40CFR Part 264 Subpart O or 40CFR Part 265 Subpart D or by combustion in fuel substitution units in accordance with applicable technical requirements, and I have been unable to detect the non-wastewater organic constituents despite having used good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- E. RESTRICTED WASTE SUBJECT TO A VARIANCE. This waste is subject to a national capacity variance, a treatable variance, or a case - by - case extension. Enter the effective date of the prohibition in this column as well. For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40CFR Part 265.45."
- F. RESTRICTED WASTE WHICH CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT. "I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32, or RCRA Section 3004(d), and therefore can be land disposed without further

treatment." A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. " I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40CFR Part 268 subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification including the possibility of a fine and imprisonment."

- G. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS. This waste is a newly identified waste that is not currently subject to any 40CFR 265 restrictions.

TABLE A
Treatment Standards for F001 - F005 Spent Solvents

Waste Code	Constituents of Concern	Non-Wastewater	
		Total composition mg/kg	TCLP mg/L
F001 <input type="checkbox"/>	Carbon Tetrachloride	6	-
F001 <input type="checkbox"/>	Methylene Chloride	30	-
F001 <input type="checkbox"/>	Tetrachloroethylene	6	-
F001 <input type="checkbox"/>	1,1,1-Trichloroethane	6	-
F001 <input type="checkbox"/>	Trichloroethylene	6	-
F001 <input type="checkbox"/>	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F001 <input type="checkbox"/>	Trichloromonofluoromethane	30	-
F002 <input type="checkbox"/>	Chlorobenzene	6	-
F002 <input type="checkbox"/>	o-dichlorobenzene	6	-
F002 <input type="checkbox"/>	Methylene Chloride	30	-
F002 <input type="checkbox"/>	Methylene Chloride (Pharmaceutical Industry)	-	-
F002 <input type="checkbox"/>	Tetrachloroethylene	6	-
F002 <input type="checkbox"/>	1,1,1-Trichloroethane	6	-
F002 <input type="checkbox"/>	1,1,2-Trichloroethane	6	-
F002 <input type="checkbox"/>	Trichloroethylene	6	-
F002 <input type="checkbox"/>	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F002 <input type="checkbox"/>	Trichloromonofluoromethane	30	-

Waste Code	Constituents of Concern	Non-Wastewater	
		Total composition mg/kg	TCLP mg/L
F003 <input type="checkbox"/>	Acetone	160	-
F003 <input type="checkbox"/>	n-Butyl Alcohol	2.6	-
F003 <input type="checkbox"/>	Cyclohexanone		0.75
F003 <input type="checkbox"/>	Ethyl Acetate	33	-
F003 <input type="checkbox"/>	Ethyl Benzene	10	-
F003 <input type="checkbox"/>	Ethyl Ether	160	-
F003 <input type="checkbox"/>	Methanol		0.75
F003 <input type="checkbox"/>	Methyl Isobutyl Ketone	33	
F003 <input type="checkbox"/>	Xylenes (total)	30	-
F004 <input type="checkbox"/>	Cresol	5.6	-
F004 <input type="checkbox"/>	Nitrobenzene	14	-
F005 <input type="checkbox"/>	Benzene	10	-
F005 <input type="checkbox"/>	Carbon Disulfide		4.8
F005 <input type="checkbox"/>	2-Ethoxyethanol	INCIN	
F005 <input type="checkbox"/>	Isobutyl Alcohol	170	
F005 <input type="checkbox"/>	Methyl Ethyl Ketone	36	
F005 <input type="checkbox"/>	2-Nitropropane	INCIN	
F005 <input type="checkbox"/>	Pyridine	16	
F005 <input type="checkbox"/>	Toluene	10	

TABLE B

[illegible]

TABLE C

If D001, D002, or D012 through D043 requires treatment to 268.40 standards, then each underlying hazardous constituent present in the waste at the point of generation and at a level above the UTS constituents listed treatment standard must be checked.

If D001 or D002 requires treatment of deactivation and meets F039 standards then each underlying hazardous constituent present in the waste at the point of generation and at a level above the F039 and UTS constituent listed treatment standard must be checked.

IF THERE ARE NO UTS CONSTITUENTS PRESENT IN THE WASTE UPON IT'S INITIAL GENERATION CHECK HERE ☐

Check the underlying individual constituents likely to be present from the list below:

Regulated Constituent	WW	NWW
Acenaphthylene	0.059	3.4
acenaphthene	0.059	3.4
Acetone	0.28	160
Acetonitrile	5.6	1.8 ²
Acetophenone	0.010	9.7
2-Acetylaminofluorene	0.059	140
Acrolein	0.29	NA
Acrylamide	19 ²	23 ²
Acrylonitrile	0.24	84
Aldrin	0.021	0.066
4-Aminobiphenyl	0.13	NA
Aniline	0.81	14
Anthracene	0.059	3.4
Aramite	0.36	NA
alpha-BHC	0.00014	0.066
beta-BHC	0.00014	0.066
delta-BHC	0.023	0.066
gamma-BHC (Lindane)	0.00017	0.066
Benzene	0.14	10
Benz (a) anthracene	0.059	3.4
Benzal chloride	0.055 ²	60 ²
Benzo (b) fluoranthene	0.11	68
Benzo (k) fluoranthene	0.11	68
Benzo (g,h,i) perylene	0.0055	18
Benzo (a) pyrene	0.061	34
Bromodichloromethane	0.35	15
Bromoform (Tribromomethane)	0.63	15
Bromomethane (methyl bromide)	0.11	15
4-Bromophenyl phenyl ether	0.0055	15
n-Butanol (n-butyl alcohol)	5.6	2.6
Butyl benzyl phthalate	0.017	28
2-sec Butyl 4,6 dinitrophenol (Dinoseb)	0.066	2.5
Carbon Disulfide	3.8	1.8 ^{1,2}
Carbon Tetrachloride	0.057	6.0
o-Dichlorobenzene	0.088	6.0
p-Dichlorobenzene	0.090	6.0
Dichlorodifluoromethane	0.23	7.2
1,1-Dichloroethane	0.59	6.0
1,2-Dichloroethane	0.21	6.0
1,1-Dichloroethylene	0.025	6.0
trans-1,2-Dichloroethylene	0.054	30
2,4-Dichlorophenol	0.044	14
2,6-Dichlorophenol	0.044	14
1,2-Dichloropropane	0.85	18
cis-1,3-Dichloropropylene	0.036	18
trans-1,3-Dichloropropylene	0.036	18
Dieldrin	0.017	0.13
Diethyl phthalate	0.20	28
p-Dimethylaminoazobenzene	0.13	NA
2,4-Dimethyl Phenol	0.036	14
Dimethyl Phthalate	0.047	28
Di-n-butyl Phthalate	0.057	28

Regulated Constituent	WW	NWW
chlordan (alpha & gamma)	0.0033	0.26
p-Chloroaniline	0.46	16
Chlorobenzene	0.057	6.0
Chlorobenzilate	0.10	NA
2-chloro-1,3 butadiene	0.057	0.28 ²
Chlorodibromomethane	0.27	15
Chloroethane	0.036	6.0
bis-(2-Chloroethoxy) methane	0.033	7.2
bis-(2-Chloroethyl) ether	0.033	6.0
Chloroform	0.046	6.0
bis-(2-Chloroisopropyl) ether	0.055	6.0
p-Chloro-m-cresol	0.018	14
2-Chloroethyl Vinyl ether	0.062 ²	NA ²
Chloromethane (methyl chloride)	0.19	30
2-Chloronaphthalene	0.055	5.6
2-Chlorophenol	0.044	5.7
3-Chloropropylene	0.036	30
Chrysene	0.059	3.4
o-Cresol	0.11	5.6
Cresol (m- and p- isomers)	0.77	5.6
Cyclohexanone	0.36	0.75 ²
1,2-Dibromo-3-Chloropropane	0.11	15
1,2-Dibromoethane (Ethylene dibromide)	0.028	15
Dibromomethane	0.11	15
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.72	10
o,p-DDD	0.023	0.087
p,p-DDD	0.023	0.087
o,p-DDE	0.031	0.087
p,p-DDE	0.031	0.087
o,p-DDT	0.0039	0.087
p,p-DDT	0.0039	0.087
Dibenz (a,h) anthracene	0.055	8.2
Dibenz (a,e) pyrene	0.061	NA
m-Dichlorobenzene	0.036	6.0
Fluoranthene	0.068	3.4
Fluorene	0.059	3.4
Heptachlor	0.0012	0.066
Heptachlor epoxide	0.016	0.066
Hexachlorobenzene	0.055	10
Hexachlorobutadiene	0.055	5.6
Hexachlorocyclopentadiene	0.057	2.4
Hexachlorodibenzo-furans	0.000063	0.001
Hexachlorodibenzo-p-dioxins	0.000063	0.001
Hexachloroethane	0.055	30
Hexachloropropylene	0.035	30
Indeno (1,2,3-c,d) pyrene	0.0055	3.4
Iodomethane	0.19	65
Isobutanol (Isobutyl Alcohol)	5.6	170
Isodrin	0.021	0.066
Isosafrole	0.081	2.6
Kepone	0.0011	0.13
Methacrylonitrile	0.24	84

Regulated Constituent	WW	NWW
1,4-Dinitrobenzene	0.32	2.3
4,6-Dinitro-o-cresol	0.28	160
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
Di-n-propylnitrosoamine	0.40	14
1,4-Dioxane	NA	170
Diphenylamine ⁴	0.92	13 ³
Diphenylnitrosoamine ⁴	0.92	13 ³
1,2-Diphenyl hydrazine	0.087	NA
Disulfoton	0.017	6.2
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl cyanide (Propanenitrile)	0.24	360
Ethyl ether	0.12	160
bis-(2-Ethylhexyl) phthalate	0.28	28
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NA
Famphur	0.017	15
N-Nitrosopyrrolidine	0.013	35
Parathion	0.014	4.6
PCB's (Total all isomers or Aroclors)	0.10	10
Pentachlorobenzene	0.55	10
Pentachloroethane	0.55 ²	6.0 ²
Pentachlorodibenzo-furans	0.000035	0.001
Pentachlorodibenzo-p-dioxins	0.000063	0.001
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4
Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
Phorate	0.021	4.6
Phthalic acid	0.55 ²	28 ²
Phthalic anhydride	0.055	28 ²
Pronamide	0.93	15
Pvrene	0.067	82
Pvridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	79
2,4,5-T	0.72	79
1,2,4,5-Tetrachlorobenzene	0.055	14
Tetrachlorodibenzo-furans	0.000063	0.001
Tetrachlorodibenzo-p-dioxins	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6.0
1,1,2,2-Tetrachloroethane	0.057	6.0
Tetrachloroethylene	0.056	6.0
2,3,4,6-Tetrachlorophenol	0.030	7.4
Toluene	0.80	10
Toxaphene	0.0095	2.6

Regulated Constituent	WW	NWW
Methanol	5.6	0.75 ^{1,2}
Methacrylonitrile	0.081	1.5
Methoxychlor	0.25	0.18
3-Methylcholanthrene	0.0055	15
4,4-Methylene-bis-(2-chloroaniline)	0.50	30
Methylene chloride	0.089	30
Methyl Ethyl Ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methanesulfonate	0.018	NA
Methyl parathion	0.014	4.6
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NA
o-Nitroaniline	0.27 ²	14 ²
p-Nitroaniline	0.028	28
Nitrobenzene	0.068	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	0.028 ²	13 ²
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.40	28
N-Nitrosodimethylamine	0.40	2.3 ²
N-Nitroso-di-n-butylamine	0.40	17
N-Nitrosomethylmethylethylamine	0.40	2.3
N-Nitrosomorpholine	0.40	2.3
N-Nitrosopiperidine	0.013	35
1,2,4-Trichlorobenzene	0.55	19
1,1,1-Trichloroethane	0.054	6.0
1,1,2-Trichloroethane	0.054	6.0
Trichloroethylene	0.054	6.0
Trichloromonofluoromethane	0.020	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
Tris-(2,3-dibromopropyl)phosphate	0.11	0.10 ²
Vinyl chloride	0.27	6.0
Xylene (sum of o-, m-, and p-isomers)	0.32	30
Cyanides (Total)	1.2	590
Cyanides (Amenable)	0.86	30 ¹
Arsenic	1.4	5.0 ¹
Barium	1.2	7.6 ¹
Beryllium	0.82	0.014 ^{1,2}
Cadmium	0.69	0.19 ¹
Chromium (Total)	2.77	0.86 ¹
Fluoride	35	NA
Lead	0.69	0.37 ¹
Mercury (Not from Retorting)	0.15	0.025 ¹
Antimony	1.9	2.1 ¹
Nickel	3.98	5.0 ¹
Selenium	0.82	0.16 ¹
Silver	0.43	0.30 ¹
Sulfide	14	NA
Thallium	1.4	0.078 ^{1,2}
Vanadium	4.3	0.23 ^{1,2}
Zinc	2.61 ³	NA

1. These concentrations are expressed in mg/L and are measured through an analysis of TCLP extract; all others are measured through a total waste analysis.
2. These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.
3. Zinc is not an Underlying Hazardous Constituent requiring treatment in D001, D002, or D012-D043 wastes.
4. These compounds are regulated by the sum of their concentration instead of as individual constituents.

NOTE: Wastewater units are in mg/L, non-wastewater are in mg/Kg.

TABLE D
LAB PACK CERTIFICATION
(268.42, Appendix iv)

1. **APPENDIX IV DRUMS:**

This notification and certification applies to the following drums on this shipment. List the Lab Pack drum identification numbers below:

2. **ALL DRUMS THAT MAY NOT BE PACKAGED AS APPENDIX IV TYPE LABPACKS:**

The US EPA Hazardous waste codes are **D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151**. The alternative treatment standard is incineration (INCIN). This notification applies to those wastes in the following drums on this shipment. List the Lab Pack drum identification numbers below:

#CM-01			

CERTIFICATION:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment.

I hereby certify that all information in this and all associated documents is complete and accurate to the best of my knowledge and information has all the necessary permits and licenses for the waste that has been identified by the profile, if approved for management.

Authorized Representative Signature: 

Print or Type Name: Scott Ickes

Title: Manager of QA and Environmental Affairs

Date: March 2, 2008

N:\USER\FORMS\BLANKS\LAND_BAN.4



LAB PACK INVENTORY SHEET

GENERATOR: Climax Molybdenum




DATE: March 5, 2008

Drum # CM01 Initials: _____

PAGE: 1 OF 1

Shipping Description: Waste Toxic solid, Inorganic n.o.s., (Arsenic Trioxide, Sodium Azide)

Hazard Class: 6.1 ID No.: UN3288 PG#: III[illegible]

 **To:** _____
 **Cc:** _____
 **Bcc:** _____
Subject: Fw: Lab Pack

Lori,

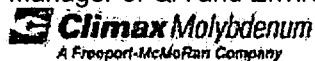
We have the following chemicals that we need to ship as part of our lab pack:

Ammonium Vanadate	1 lb
Arsenic Trioxide	0.25 lb.
Sodium Azide	0.25 lbs.

MSDS attached.

Thanks,

Scott Ickes
Manager of QA and Environmental Affairs



(319)463-2224
Scott_Ickes@fmi.com

ATTACHMENT 11 Page 14 of 14

1.0 INTRODUCTION

This Spill Prevention, Control, and Countermeasure (SPCC) Plan was prepared in accordance with 40 Code of Federal Regulations (CFR), Part 112, Oil Pollution Prevention and is required because the facility stores greater than 1,320 gallons of oil and petroleum products above ground. This SPCC Plan describes the procedures followed by Climax Molybdenum Company to prevent, control, and mitigate releases of oil and petroleum products to the environment at its Fort Madison conversion facility located in Fort Madison, Iowa. This plan supersedes earlier SPCC plans developed and implemented to meet the SPCC regulations in effect since 1974.

Climax Molybdenum – Fort Madison has developed this SPCC Plan to meet the majority of the requirements of the July 17, 2002 revisions that go into effect on November 10, 2010. Certain aspects of the SPCC Plan may not yet meet the full requirements of the 2002 revisions; however, the SPCC Plan will be fully updated to meet those requirements prior to November 10, 2010. This SPCC Plan does not follow the exact order presented in 40 C.F.R. Part 112. Section headings identify, where appropriate, the relevant section(s) of the SPCC regulations. Additionally, Appendix A provides a cross-reference table for the applicable requirements of 40 CFR Part 112 and the corresponding sections in this SPCC Plan where the requirements are addressed.

2.0 APPROVAL AND CERTIFICATION [40 CFR 112.3(d)]

2.1 Management Approval

Climax Molybdenum – Fort Madison is committed to the prevention of discharges of oil or oily wastewater to navigable waters and the environment. Climax Molybdenum maintains the highest standards for spill prevention through regular review, updating, and implementation of this SPCC Plan for the Fort Madison facility. Climax Molybdenum hereby commits the required equipment, material, and human resources to expeditiously control and remove discharges of oil in harmful quantities.

Name: Gary Glasgow
Signature: *Gary Glasgow*
Title: General Manager
Date: 6/30/09

2.2 Commitment to Health and Safety

Climax Molybdenum is equally committed to the elimination of all workplace injuries and illnesses. We believe that our most important asset is our people and that reaching zero and maintaining that standard is the only morally acceptable level of performance in health and safety management. To achieve this level of performance, Fort Madison provides spill response training to all employees that handle oil products when first hired and on an annual basis thereafter.

Within Climax Molybdenum, safety is a fundamental responsibility of each employee of the corporation. Management is held accountable for promoting safety on the job, providing a safe work environment in which hazards are controlled when elimination is not feasible, and for the implementation of systems and techniques designed to prevent incidents from occurring. Employees are responsible for reporting any unsafe conditions observed during day-to-day activities to their supervisors.



ZERO AND BEYOND

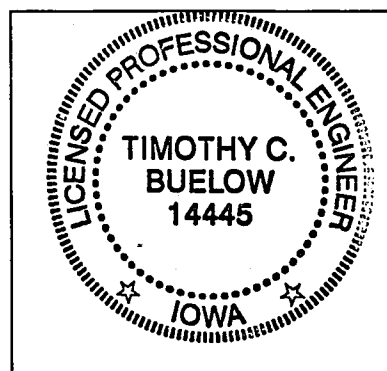
Handwritten signature/initials

2.3 Professional Engineer Certification [40 CFR 112.3(d)]

In order for this SPCC Plan to be effective and meet the requirements of Title 40, Part 112 of the Code of Federal Regulations (40 CFR Part 112), the undersigned Registered Professional Engineer attests that:

- He/She is familiar with the requirements of 40 CFR Part 112;
- He/She has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel;
- This Spill Prevention, Control, and Countermeasures Plan has been prepared consistent with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR Part 112;
- That procedures for required inspections and testing have been established; and
- That this SPCC Plan is adequate for this facility.

Name: TIMOTHY C. BUELOW
Signature: *Timothy C. BueLOW*
Registration Number: 14445
Date: 3-3-08



Seal

This certification shall in no way relieve Climax Molybdenum of the responsibility to prepare and fully implement this SPCC Plan in accordance with 40 CFR Part 112.

dmw

Table C1
Bulk Oil Storage Inventory
 Spill Prevention Control and Countermeasures Plan
 Fort Madison

SPCC Tank ID	Other Designation - Listing on Facility Diagram	Facility Area	Contents	Nominal Capacity (gal)
Maintenance Area				
Gasoline Storage Tanks 1 & 2	E & F	East of Maintenance Shop	Unleaded Gasoline	500 each
Maintenance Lube Oil Storage	H	South side of maintenance shop	Synthetic Oil	~20 drums @ 55 gals. Each
Utilities Area				
Main Storage Tank	A	East of Utilities Bldg.	# 2 Fuel Oil	124,000 (when in use)
Oil-Water Separator	B	East of Utilities Bldg.	# 2 Fuel Oil	12,000 (when in use)
Utilities Day Tanks 1 & 2	C & D	South of Utilities Bldg.	# 2 Fuel Oil	250 each
Molysulfide® Area				
Used Oil Tank	G	West side of building	Used Oil	5,000
Chemical West Boil Tank	K	Southwest corner of building	Empty	750
Acid Plant Area				
Acid Plant Oil Tank	J	Southeast side of Acid Plant	# 2 Fuel Oil	5,300
North and South Main Gas Blowers	L & M	Northwest corner of Acid Plant	Synthetic Oil	150 each
Drum Storage Areas				
Stores Lube Oil Storage	I	Astro Building	Synthetic Oil	~20 drums @ 55 gal. each
Transformers				
Substation 1 North	N	East of Emergency Generator Building	non-PCB Oil	200
Substation 1 South	O	North of Emergency Generator Building	non-PCB Oil	200
Substation 2	P	East of Molysulfide® Building	non-PCB Oil	1,466
Roaster Substation	Q	Inside Roaster Building on west side off of Control Room	non-PCB Oil	1,400
POS Hot Oil System	R	Inside POS area on northwest side of bldg.	Synthetic Oil	100
IEA Generator Facility	S	Along west facility road	non-PCB Oil & # 2 Fuel Oil	15,139
Interior Substation North	T	Inside building directly south of maintenance shop	non-PCB Oil	200

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

000222653

2. Page 1 of

3. Emergency Response Phone

4. Manifest Tracking Number

006902773 JJK

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Chimax
2599 Hwy 61, Ft. Madison, Ia, 52627

Generator's Phone: 319-463-2224

6. Transporter 1 Company Name

U.S. EPA ID Number

Future Environmental, Inc

7. Transporter 2 Company Name

U.S. EPA ID Number
IL D094831396

8. Designated Facility Name and Site Address

U.S. EPA ID Number

FUTURE ENVIRONEMNTAL, INC.
2018 S DARST STREET
PEORIA, ILLINOIS 61607

Facility's Phone:

309-637-2366

9a. HM 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))

10. Containers

No.

Type

11. Total Quantity

12. Unit Wt/Vol.

13. Waste Codes

ON-SPECIFICATION USED OIL - NON COMBUSTIBLE

001

TT

2975

G

14. Special Handling Instructions and Additional Information

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offor's Printed/Typed Name

Signature

Month Day Year

X Scott Ickes

[Signature]

8/16/10

16. International Shipments

☐ Import to U.S.

☐ Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

William E. Hale

[Signature]

8/16/10

Transporter 2 Printed/Typed Name

Signature

Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

18b. Alternate Facility (or Generator)

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.

2.

3.

ATTACHMENT 13 Page 1 of 3

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Month Day Year

Worland Ppk

[Signature]

8/16/10

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number IAD00022653		2. Page 1 of		3. Emergency Response Phone		4. Manifest Tracking Number 006900472 JJK			
		5. Generator's Name and Mailing Address CLIMAX 2598 HWY 61, FT. MADISON, IA 52627		Generator's Site Address (if different than mailing address)							
6. Transporter 1 Company Name Future Environmental, Inc.		U.S. EPA ID Number ILD984831396									
7. Transporter 2 Company Name		U.S. EPA ID Number									
8. Designated Facility Name and Site Address FUTURE ENVIRONEMNTAL, INC. 2018 S DARST STREET PEORIA, ILLINOIS 61607		U.S. EPA ID Number									
Facility's Phone: 309-637-2366											
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		1. ON-SPECIFICATION USED OIL - NON COMBUSTIBLE				001 TT		1,150	G		
		2. Non Hazardous Waste Water NOT Regulated by DOT				001 TT		300	G		
		3.									
		4.									
14. Special Handling Instructions and Additional Information											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Offor's Printed/Typed Name X Joseph L. Bartholomew											
Signature Joseph L. Bartholomew											
Month Day Year 6 28 10											
INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:										
	Transporter signature (for exports only):										
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials										
	Transporter 1 Printed/Typed Name William E. Haide										
Signature William E. Haide											
Month Day Year 6 28 10											
Transporter 2 Printed/Typed Name											
Signature											
Month Day Year											
DESIGNATED FACILITY	18. Discrepancy										
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection										
	Manifest Reference Number:										
	18b. Alternate Facility (or Generator) U.S. EPA ID Number										
	Facility's Phone:										
18c. Signature of Alternate Facility (or Generator) Month Day Year											
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)											
1. 2. 3. 4.											
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a											
Printed/Typed Name William E. Haide											
Signature William E. Haide											
Month Day Year 6 28 10											

FUTURE

ENVIRONMENTAL, INC.

2018 Darst Street • Peoria, IL 60167 • (866)579-6900

SPECIAL WASTE HAULER I.D. #3922		DATE
NAME	Chimax	6-28-10
ADDRESS	2598 Hwy 61, Ft. Madison, IA	
PHONE NUMBER	319-463-2224	
DESCRIPTION		AMOUNT
E.P.A. NON-HAZARDOUS		
D.O.T. NON-REGULATED		
Used Oil		
1150 gal @ .50		\$575.00
CR# 8358		
Waste Water		
300 gal @ .38		\$114.00
HALOGEN LEVEL		
<1000 PPM		
24 HOUR SPILL EMERGENCY ONLY		
PHONE # 800-424-9300		
TOTAL		\$689.00

P062782

Rec'd by

Joseph L. Bartholomew
THANK YOU

A-TEC RECYCLING INC.

P.O. BOX 7391
DES MOINES, IA 50309-7391

(515)244-7357
Fax: (515)263-6970

(800)551-4912
Federal ID:42-1411487

INVOICE

090828-28894

Accounts Receivable: Accounting Dept at (800) 551-4912

Customer

ACCTS PAYABLE
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 13388
PHOENIX, AZ 85002-3388

Generator

CLIMAX MOLYBDENUM COMPANY
2598 HWY 61
FORT MADISON, IA 52627

Invoice Date	Terms	PO #	Ordered By
9/17/2009	NET 30	FT2428	

Quantity	Item #	Description	Price	Amount
261	40	Fluorescent 4' and Under	\$0.41	\$107.01
1	50	U Shape and Circular	\$0.55	\$0.55
8	60	High Intensity Discharge (HID)	\$1.67	\$13.36
37	80	Fluorescent Greater than 4'	\$0.55	\$20.35
25	110	Ballasts - non PCB	\$1.00	\$25.00
11	115	Non-PCB Capacitors	\$1.00	\$11.00
7.5	320	Batteries - Lead Acid (lbs)	\$1.95	\$14.63
5.3	330	Batteries - Alkaline (lbs)	\$1.95	\$10.34
5.5	370	Batteries - Lithium (lbs)	\$10.00	\$55.00
11.9	400	Computer (CRT) Monitors (lbs)	\$0.75	\$8.93
107.8	410	Computers - Other Components (lbs)	\$0.50	\$53.90

Total of Items Listed (not including taxes if applicable): \$320.07

COPY

ATTACHMENT 14 Page 1 of 5

Pay This Amount 

\$320.07

A-TEC RECYCLING INC.

P.O. BOX 7391
DES MOINES, IA 50309-7391

(515)244-7357
Fax: (515)263-6970

(800)551-4912
Federal ID:42-1411487

INVOICE

091117-29280

Accounts Receivable: Accounting Dept at (800) 551-4912

Customer

ACCTS PAYABLE
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 13388
PHOENIX, AZ 85002-3388

Generator

CLIMAX MOLYBDENUM COMPANY
2598 HWY 61
FORT MADISON, IA 52627

Invoice Date	Terms	PO #	Ordered By
11/27/2009	NET 30	FT2428	

Quantity	Item #	Description	Price	Amount
274	40	Fluorescent 4' and Under	\$0.41	\$112.34
23	60	High Intensity Discharge (HID)	\$1.67	\$38.41
33	80	Fluorescent Greater than 4'	\$0.55	\$18.15
54.2	100	Ballasts - PCB (lbs)	\$0.95	\$51.49
41	110	Ballasts - non PCB	\$1.00	\$41.00
20.5	330	Batteries - Alkaline (lbs)	\$1.95	\$39.98
4.9	370	Batteries - Lithium (lbs)	\$10.00	\$49.00
80.3	410	Computers - Other Components (lbs)	\$0.50	\$40.15

Total of Items Listed (not including taxes if applicable): \$390.52

COPY

ATTACHMENT 14 Page 2 of 5

Pay This Amount 

\$390.52

A-TEC RECYCLING INC.

P.O. BOX 17099
DES MOINES, IA 50317-7099

(515)244-7357
Fax: (515)263-6970

(800)551-4912
Federal ID:42-1411487

INVOICE

100209-29686

Accounts Receivable: Accounting Dept at (800) 551-4912

Customer

ACCTS PAYABLE
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 13388
PHOENIX, AZ 85002-3388

Generator

CLIMAX MOLYBDENUM COMPANY
2598 HWY 61
FORT MADISON, IA 52627

Invoice Date	Terms	PO #	Ordered By
3/4/2010	NET 30	FT2428	

Quantity	Item #	Description	Price	Amount
124	40	Fluorescent 4' and Under	\$0.41	\$50.84
62	60	High Intensity Discharge (HID)	\$1.67	\$103.54
47	80	Fluorescent Greater than 4'	\$0.55	\$25.85
24	110	Ballasts - non PCB	\$1.00	\$24.00
3	115	Non-PCB Capacitors	\$1.00	\$3.00
14.8	330	Batteries - Alkaline (lbs)	\$1.95	\$28.86
3.7	370	Batteries - Lithium (lbs)	\$10.00	\$37.00
35.7	400	Computer (CRT) Monitors (lbs)	\$0.75	\$26.78
98.3	410	Computers - Other Components (lbs)	\$0.50	\$49.15

412# Total of Items Listed (not including taxes if applicable): **\$349.02**

Please note address change.

*P.O. Box 17099
Des Moines, IA 50317-9402*

COPY

ATTACHMENT *14* Page *3* of *5*
ATTACHMENT
Pay This Amount **\$349.02**

A-TEC RECYCLING INC.

P.O. BOX 17099
DES MOINES, IA 50317-4902

(515)244-7357
Fax: (515)263-6970

(800)551-4912
Federal ID:42-1411487

INVOICE

100513-30208

Accounts Receivable: Accounting Dept at (800) 551-4912

Customer

ACCTS PAYABLE
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 13388
PHOENIX, AZ 85002-3388

Generator

CLIMAX MOLYBDENUM COMPANY
2598 HWY 61
FORT MADISON, IA 52627

Invoice Date	Terms	PO #	Ordered By
6/17/2010	NET 30	ZF0034	

Quantity	Item #	Description	Price	Amount
74	40	Fluorescent 4' and Under	\$0.41	\$30.34
43	60	High Intensity Discharge (HID)	\$1.67	\$71.81
14	110	Ballasts - non PCB	\$1.00	\$14.00
6	115	Non-PCB Capacitors	\$1.00	\$6.00
13.9	310	Batteries - Nickel Cadmium (Ni-Cad) (lbs)	\$1.95	\$27.11
146.4	400	Computer (CRT) Monitors (lbs)	\$0.75	\$109.80
493.0	410	Computers - Other Components (lbs)	\$0.50	\$246.50
4	421	Incandescent	\$0.25	\$1.00

Total of Items Listed (not including taxes if applicable): \$506.56

****Please note address change.****

P.O. Box 17099
Des Moines, IA 50317-9402

COPY

ATTACHMENT 14 Page 4 of 5
ATTACHMENT

Pay This Amount

\$506.56

A-TEC RECYCLING INC.

P.O. BOX 17099
DES MOINES, IA 50317-9402

(515)244-7357
Fax: (515)263-6970

(800)551-4912
Federal ID:42-1411487

INVOICE

100818-30726

Accounts Receivable: Accounting Dept at (800) 551-4912

Customer

ACCTS PAYABLE
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 520
PHOENIX, AZ 85001

Generator

CLIMAX MOLYBDENUM COMPANY
2598 HWY 61
FORT MADISON, IA 52627

Invoice Date	Terms	PO #	Ordered By
9/1/2010	NET 30	ZF0034	

Quantity	Item #	Description	Price	Amount
97	40	Fluorescent 4' and Under	\$0.41	\$39.77
4	50	U Shape and Circular	\$0.55	\$2.20
13	60	High Intensity Discharge (HID)	\$1.67	\$21.71
9	80	Fluorescent Greater than 4'	\$0.55	\$4.95
11	110	Ballasts - non PCB	\$1.00	\$11.00
8.8	310	Batteries - Nickel Cadmium (Ni-Cad) (lbs)	\$1.95	\$17.16
4.6	320	Batteries - Lead Acid (lbs)	\$1.95	\$8.97
11.2	330	Batteries - Alkaline (lbs)	\$1.95	\$21.84
9.0	370	Batteries - Lithium (lbs)	\$10.00	\$90.00
51.0	400	Computer (CRT) Monitors (lbs)	\$0.75	\$38.25
110.3	410	Computers - Other Components (lbs)	\$0.50	\$55.15

Total of Items Listed (not including taxes if applicable): \$311.00

****Please note address change.****

P.O. Box 17099
Des Moines, IA 50317-9402

COPY

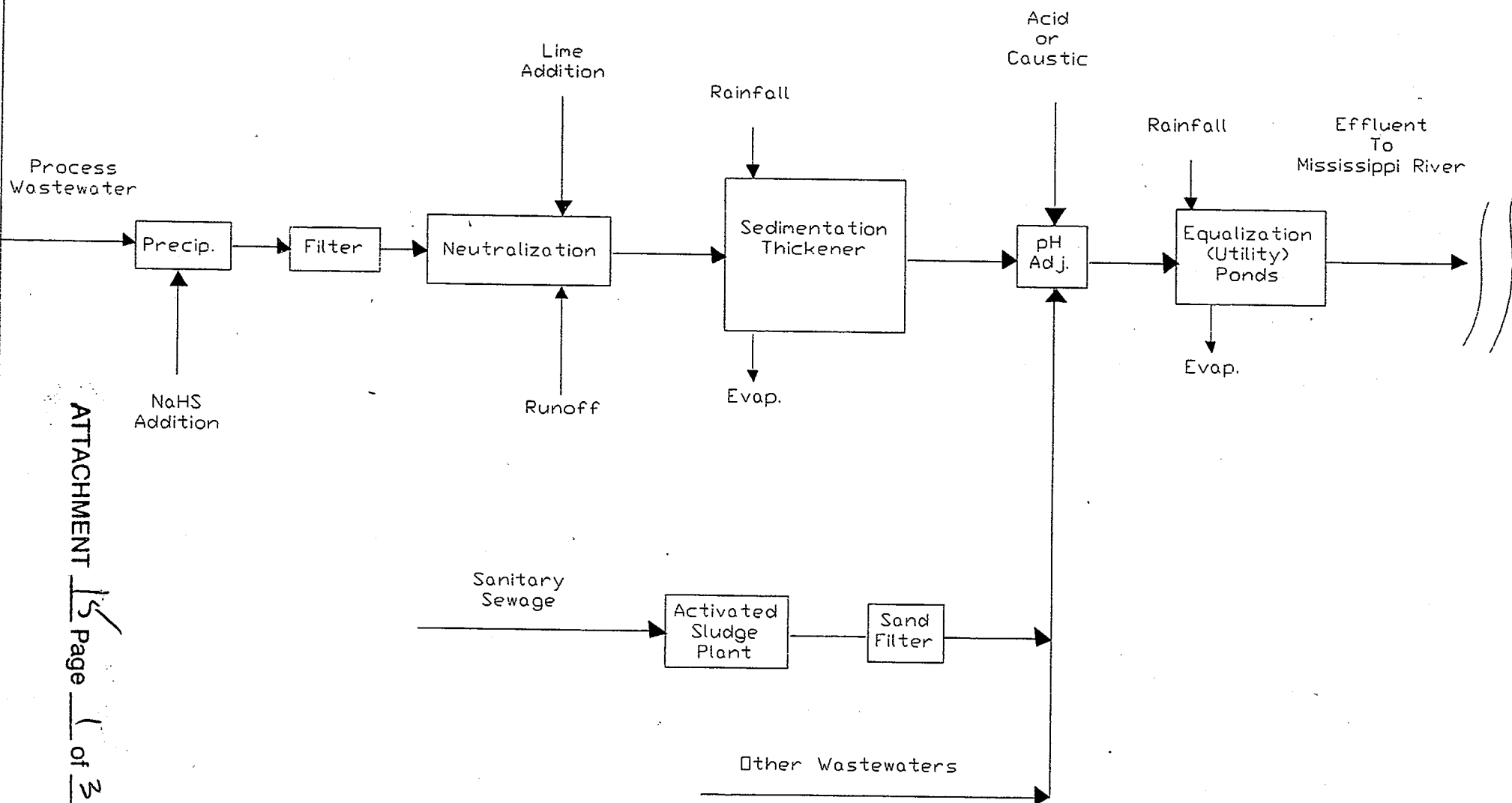
ATTACHMENT 14 Page 5 of 5

Pay This Amount 

\$311.00

Proposed Wastewater Flow Schematic

Climax Molybdenum Co.
Fort Madison, Iowa



IOWA DEPARTMENT OF NATURAL RESOURCES
National Pollutant Discharge Elimination System (NPDES) Permit

PERMITTEE

CLIMAX MOLYBDENUM CO.
2598 HIGHWAY 61
P.O. BOX 220
FORT MADISON, IA 52627

IDENTITY AND LOCATION OF FACILITY

CLIMAX MOLYBDENUM CO.
Section 22, T 67N, R 5W
LEE County, Iowa

IOWA NPDES PERMIT NUMBER: 5625106

RECEIVING STREAM

MISSISSIPPI RIVER

DATE OF ISSUANCE: 03-12-1998

ROUTE OF FLOW

DATE OF EXPIRATION: 03-11-2003

UNNAMED DITCH TO THE MISSISSIPPI RIVER.

YOU ARE REQUIRED TO FILE
FOR RENEWAL OF THIS PERMIT BY: 09-12-2002

EPA NUMBER: IA0059978

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C 1342(b)), Iowa Code section 455B.174, and rule 567--64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

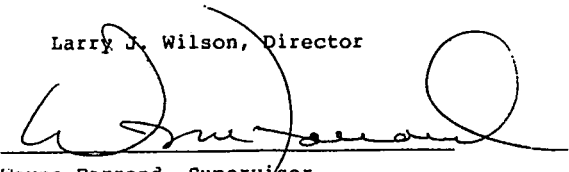
You may appeal any conditions of this permit by filing a written notice of appeal and request for administrative hearing with the director of this department within 30 days of your receipt of this permit.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this Iowa NPDES operation permit.

FOR THE DEPARTMENT OF NATURAL RESOURCES

Larry J. Wilson, Director

By


Wayne Farrand, Supervisor
Wastewater Section

ENVIRONMENTAL PROTECTION DIVISION

ATTACHMENT 15 Page 2 of 3

**IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT
FOR INDUSTRIAL MONOFILLS**

- I. Permit Number:** 56-SDP-06-80P-ILF
Climax Molybdenum Company Industrial Landfill
- II. Permitted Agency:** Climax Molybdenum Company
- III. Project Location:** The NW¼ and the W½ of the NE¼ and South 150 feet of the E ½ of the NE ¼ of Section 32, T67N, R6W, Lee County, Iowa (approx. 244 acres).
- IV. Responsible Official**

Name: Gary Glasgow, General Manager
Address: Climax Molybdenum Company
2598 Highway 61
P.O. Box 220
Fort Madison, IA 52627
Phone: (319) 463-2201
FAX: (319) 463-2284

V. Licensed Design Engineer

Name: Timothy Buelow, P.E.
Address: Barker Lemar Engineering Consultants
1801 Industrial Circle
West Des Moines, IA 50265
Phone: (515) 256-8814
FAX: (515) 256-0152
Iowa License Number: 14445

- VI. Date Permit Issued:** July 27, 2009
- VII. Permit Expiration Date:** July 27, 2012

VIII. Issued by: Anna M. Kogan
Environmental Services Division
for the Director

IX. General Provisions

The above named permitted agency is hereby authorized to operate a sanitary disposal project at the described location in conformance with Iowa Code section 455B, the rules pursuant thereto existing at the time of issuance, and any subsequent new rules which may be duly adopted, and any provisions contained in Section X of this permit.

Appendix 1-1

DATA GATHERING WORKSHEET AND CHECKLIST INSTRUCTIONS AND KEY

1. Complete all items on the applicable data gathering worksheet and checklist in a neat and legible fashion.
2. All responses will be based on the inspector's knowledge and best judgement and information obtained from facility the representative(s) at the time of the inspection.
3. A (✓) mark should be used to mark the all boxes (□) and will indicate the choice made or the action completed.
4. The Records Review Worksheet and Checklists and the Visual Review Worksheet and Checklists each have a key below the tables. Use this key when filling out these forms.
 - a. Items which are shaded gray on the worksheets and checklists are considered high priority items during inspections and should always be completed.
 - b. On the top of the worksheets and checklists are a group of boxes which represent the generator status of the facility and whether or not the facility is subject to interim status or permit requirements. The appropriate box should be checked.
5. The inspector should pay special attention to the questions contained in this box and make sure that they are able to answer them as relates to inspection documentation.

DOCUMENTATION: *HOW* are the facts known? *WHO* said what? *WHEN* did it happen? *HOW* long did it happen? and *WHAT PROOF WAS OBTAINED?*

6. Each of the forms has a space at the bottom to indicate the Attachment number and page when the form is included in the report. The attachment number and page should be used when referencing information contained on the form in the inspection report.

Appendix 1-2

PRE-INSPECTION ITEMS TO CHECK

General
Equipment:

- | | | |
|------------------|-----------------|------------------|
| - hardhat | - rubber boots | - safety shoes |
| - safety glasses | - tape measure | - back-up camera |
| - camera | - notebook | - flashlight |
| - calculator | - compass | - binoculars |
| - GPS unit | - tape recorder | - pens/markers |
| - post-its | - safety gloves | - winter gloves |
| - coveralls | - safety boots | - ear plugs |
| - film | - ice chest | - coat |
| - pH paper | - batteries | - respirator |

Special Equipment?: _____

Paperwork:

- | | | |
|----------------------------------|-------------------------------|--------------------|
| - NOV, CBI & Rec. for Doc. forms | - Notification forms | - Multi-Media form |
| - Reference Information | - Regulations (Federal/State) | - Facility Files |
| - Data Collection Worksheets | | |

Items
Needed:

- | | | |
|------------------------|-----------------------------|----------------------------|
| - Load Camera | - Credentials | - Daily Planner |
| - Change Phone Message | - Car Book/Keys/Credit Card | - Business Cards |
| - Change Phone Message | - Sign-out On Board | - Special Health or Safety |
| | Considerations? | |

Notes: _____

Appendix 1-3Facility: ClimaxDate: 9/28/10Arrival time: 9:30**DRIVE-BY**

1. Drive-by conducted from public right-of-way?

☐ Yes☐ Noas far as possible

2. Determine the direction "North" with respect to the facility and provide a brief sketch of the layout and orientation (as can be viewed from the public right-of-way):

3. Obvious concerns visible from public right-of-way (photos)? ☐ Yes ☐ No

- Containers

- Tanks

- Processing Equipment

- Loading Areas

- Unloading Areas

- Security Devices

- Open Drums

- Stressed Vegetation

- Unusual Staining

- Unusual Odors

- Obvious Discharges

- Improper Disposal

- Safety Concerns

- Other Concerns

Appendix 1-4**SITE ENTRY AND INBRIEFING**1. ☐ Used main entrance ☐ Entered during normal operating hours ☐ Excessive delays (>15 minutes - denial of access?) - ☐ No

2. Facility Representative(s):

Scott Jakes

Title: _____

Joe BartholomewTitle: Env. TechGary GlasgowTitle: Plant MgrKelly DeenTitle: Env. Tech

3. Does representative have intimate knowledge of all waste management practices?

☐ Yes☐ NoHow long in position? 5 yr in Jan.

4. Introduction:

☒ Presented credentials☒ Explained responsibility to provide accurate information and provided copies of Section 1001 and 1002 U.S.C. to facility☒ Verified presence at correct facility (checked address/I.D. #)☒ Explained authority to conduct inspection (Section 3007 of RCRA)☒ Explained the purpose, scope, and order of the inspection☒ Completed Multimedia screening checklist☒ Explained documentation process - worksheets, checklists, photos, notes, statements, etc☒ Provided SBRFA☒ Obtained GPS reading☒ Explained facility's right to claim CBI5. Was full access granted? ☒ Yes☒ By facility representative or Other (name): _____☐ No - Access denied. Name of person denying access: _____

Time of denial: _____

Reason for denial, or limitations placed on access:

Appendix 1-5

FACILITY BACKGROUND WORKSHEET

1. Site History:

Date facility began operating: 1977

Number of employees: ~138 ~6 cont.

Number of shifts/hour worked: 24/7

Number of days worked per week: _____

Size (sq. ft., how divided): ~70 acres owned ~75 developed plant site

Property owner and facility operator the same?

☒ Yes ☐ No

Climax is a subsidiary of Freeport-McMoRan Copper & Gold Co.

2. Major products or services provided: molybdates

3. Major raw materials used: molten ore, natural gas, water

4. Major manufacturing or processing operations which generate waste streams: (provide brief description)

Operation/ProcessWaste Stream(s)

Domestic WW treatment ~ 3,000 gpd ~ 2,000 lb sludge / 3mo to Meokuk POTW
process WW treatment ~ 300 K gpd ~ 4,000 tons / 2yr to SDP near Argyle

refining ops

almost all process by products (solid)
are returned to masters

5. Complete a Generator Waste Stream Worksheet and/or Off-Site Waste Stream Worksheet for the waste streams noted above and then finish this form.

6. Verified/compared above information with facility Notification Form: ☒ Yes ☐ No

7. **GENERATOR STATUS:** (based on records review)

☐ Non-generator

☒ CE (0-100kg/mo or 1 kg/mo acute waste and accumulate <1000 kg or 1kg acute waste or 100 kg of acute spill residue)

☐ SQG (100-1000kg/mo and accumulate <6000kg)

☐ LQG (>1000kg/mo)

Is facility's status solidly within above category?
(If not carefully verify status and document)

☒ Yes

☐ No

8. **TSD STATUS:**

☐ Treatment

☐ Storage

☐ Disposal

Note: Types of units, number of units, capacities, processes, etc:

N/A

9. Resolved questions from Pre-Inspection Worksheet?

☒ Yes

☐ No

☐ No Questions

10. Resolved compliance officer's questions from Pre-Inspection Worksheet?

☒ Yes

☐ No

☐ No Questions

processes alleged by Freeport are not done at Climax

11. Requested site map or diagram to identify all observations?

☒ Yes

☐ None Available

Appendix 1-6

GENERATOR WASTE STREAM WORKSHEET

1. WASTE STREAM: spent solvent from lab (mostly acetone)
 FACILITY DETERMINATION: ☒ Hazardous ☐ Non-hazardous ☐ Not done ☐ Inadequate
 WASTE CODES: D001, P003, U002
 DETERMINATION METHOD: ☒ Product knowledge ☒ Process knowledge ☐ Testing
 Documentation: _____
 GENERATING PROCESS: QC lab sample wash
 GENERATION RATE: ~ 16.5 gal last 16 mo.
 ON-SITE MANAGEMENT: Satellites ☒ Visually inspected Storage ☐ Visually inspected
 OFF-SITE MANAGEMENT/DISPOSITION: ship to Clean Harbors Hebron OH w/ solvent recovery

2. WASTE STREAM: periodic waste
 FACILITY DETERMINATION: ☐ Hazardous ☐ Non-hazardous ☐ Not done ☐ Inadequate
 WASTE CODES: _____
 DETERMINATION METHOD: ☐ Product knowledge ☐ Process knowledge ☒ Testing
 Documentation: determine when generated
 GENERATING PROCESS: _____
 GENERATION RATE: _____
 ON-SITE MANAGEMENT: Satellites ☐ Visually inspected Storage ☐ Visually inspected
 OFF-SITE MANAGEMENT/DISPOSITION: D. 5 lb old lab chem shipped off 3/08
219 lb lead sulfate shipped off 6/10

3. WASTE STREAM: aerosol waste, painting related waste
 FACILITY DETERMINATION: ☒ Hazardous ☐ Non-hazardous ☐ Not done ☐ Inadequate
 WASTE CODES: D001, D008, P003/P005
 DETERMINATION METHOD: ☒ Product knowledge ☒ Process knowledge ☐ Testing
 Documentation: _____
 GENERATING PROCESS: emptying maint. paint & spray cans & maint. painting waste
 GENERATION RATE: 30-gal drum ~ 3/4 full since 8/30/06
 ON-SITE MANAGEMENT: Satellites ☒ Visually inspected Storage ☐ Visually inspected
 OFF-SITE MANAGEMENT/DISPOSITION: _____

B. SATELLITE ACCUMULATION AREA(S)

1. Total number of satellite areas inspected at facility: _____

#	REGULATORY REQUIREMENTS	SA1: _____	SA2: _____	SA3: _____	SA4: _____
2.	Area at or near the point of generation-262.34(c)(1)	✓	✓		
3.	Area under the direct control of operator-262.34(c)(1)	✓	✓		
4.	Quantities accumulated do not exceed 55 gallons or 1 quart (acute)-262.34(c)(1)	✓	✓		
5.	Excess accumulation removed within 3 days-262.34(c)(2)	30 gal drum	30 gal drum		
6.	Containers marked identifying their contents-262.34(c)(1)(ii)	✓	✓		
7.	Containers in good condition-262.34(c)(1)(i)-265.171	✓	✓		
8.	Containers are compatible with waste-262.34(c)(1)(i)-265.172	✓	✓		
9.	Containers kept closed-262.34(c)(1)(i)-265.173(a)	✓	✓		

✓ - in compliance X - not in compliance N/A - not applicable

Above Satellite Areas with problems:

SA1: Name/Location of area: Maint shop

Person responsible for area: _____

Type(s) and Volumes of waste accumulated: aerosol can waste ~ 3/4 full drum

Number and Type of containers: 1 30-gal w puncture/vent device dated Aug 30, 2006

SA2: Name/Location of area: shed out side lab (older flamm cabinet)

Person responsible for area: _____

Type(s) and Volumes of waste accumulated: acetone/oil dated 5/27/09

Number and Type of containers: 1 30-gal container ~ 3/4 full ~ 1/2 full

SA3: Name/Location of area: _____

Person responsible for area: _____

Type(s) and Volumes of waste accumulated: _____

Number and Type of containers: _____

SA4: Name/Location of area: _____

Person responsible for area: _____

Type(s) and Volumes of waste accumulated: _____

Number and Type of containers: _____

J. USED OIL – RCRA INSPECTION CHECKLIST

1. What Used Oil activities does the facility engage in? generate, drain, crush, dispose oil filters
- a. Type of used oil generated? moly sulfide plant oil, some equip veh maint
- b. Amount of used oil generated? avg. 1,150 gal/mo, mostly from moly sulfide plant

40 CFR 279.12 Prohibition Questions

1. Is used oil being managed only in a surface impoundment or waste pile subject to regulation under 40 CFR Parts 264 or 265?
☐ Yes ☒ No ☐ Not Applicable (NA)
2. Is used oil being used as a dust suppressant? ☐ Yes ☒ No
3. Is off-specification oil fuel burned for energy recovery in only industrial furnaces, industrial boilers, utility boilers, used oil-fired space heaters, or hazardous waste incinerators identified in 40 CFR Part 279.12 (c)(1-3)? ☐ Yes ☒ No

Subpart C – Standards for Used Oil Generators

(Check here ☐ if this section is NA)

Instructions: Fill out this section if the facility generates used oil or if facility activities first caused the used oil to become subject to regulation (see definition and applicability of used oil generator in 40 CFR 279.20). Used oil generators are subject to all applicable Spill Prevention, Control and Countermeasures (SPCC) requirements (40 CFR Part 112) and underground storage tank standards (40 CFR Part 280) in addition to the requirements of Subpart C.

Regulation and Standard	Violations
279.21 Hazardous Waste Mixing 1. Is the generator mixing hazardous waste with used oil? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA If yes, is the generator of a used oil containing greater than 1,000 parts per million (ppm) total halogens managing the used oil as a hazardous waste unless the used oil presumption is rebutted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA 2. Are analytical data available? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
279.22 Used Oil Storage 1. Does the generator only store used oil in tanks, containers, or units subject to regulation under 40 CFR Parts 264 or 265? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA 2. Are containers and aboveground tanks used by a generator to store used oil in good condition, with no visible leaks? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA 3. Are containers, aboveground tanks, and fill pipes used for underground tanks labeled or marked "Used Oil"? <u>not other</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA 4. Upon detection of a release of used oil, has the generator a. Stopped the release? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA b. Contained the release? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA c. Cleaned up and managed the used oil and other materials? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA d. Repaired or replaced the containers or tanks prior to returning them to service, if necessary? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	155-gal drum in motor pool marked "used oil" oil separator (overfill pipe) water sludge from motor pool ~ 1/yr removed & returned to waste water flows to WWTP Brian Meierott Maint. Gen. Supv. 20K gallon tank in moly sulfide fill pipe not marked in motor pool seeps
279.23 Used Oil Storage 1. Is the generator burning used oil in used oil fired space heaters only when a. The heater burns only used oil that the owner or operator generates or used oil received from household do-it-yourself generators? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA b. The heater is designed to have a maximum capacity of not more than 0.5 million British Thermal Units per hour? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA c. The combustion gasses from the heater are vented to ambient air? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

Regulation and Standard		Violations
279.24 Off-Site Shipment 1. Has the generator ensured that the used oil is hauled only by a transporter that has obtained a U.S. Environmental Protection Agency (EPA) identification (ID) number? 2. Does the generator have a tolling arrangement with a transporter without an EPA ID number? <i>If yes, answer the three following questions. If no, move to question 6</i> 3. Is the used oil reclaimed and returned by the processor or re-refiner to the generator for use as a lubricant, cutting oil, or coolant? 4. Does the tolling contract indicate the type of used oil and the frequency of shipment? 5. Is the vehicle used to transport the used oil to the processing or re-refining facility and to deliver recycled used oil back to the generator owned and operated by the used oil processor or re-refiner? 6. Does the generator transport used oil generated at the generator's site or used oil collected from household do-it-yourselfers to a used oil collection center or to aggregation points owned by the generator?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<i>Future Environmental</i> 8/16/10 2975 gal 6/28/10 1156 gal 5/25/10 1256 gal 4/14/10 2175 gal 2/1/10 1900 gal 12/17/09 2500 gal 10/21/09 1900 gal 8/31/09 2075 gal <i>- 300 gal oily w/o pumped from sump ea. 2 mo.</i>
Regulation and Standard		Violations
7. Does the generator transport used oil in a vehicle owned by the generator or an employee of the generator? 8. Does the generator transport no more than 55 gallons of used oil at any time? 9. Does the generator transport the used oil to a used oil collection center that is registered, licensed, permitted, or recognized by a state/county/municipal government to manage used oil?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	

For further Used Oil questions refer to Appendix 2-4:

Subpart D – Standards for Used Oil Collection Centers and Aggregation Points

Subpart E – Standards for Used Oil Transporters and Transfer Centers

Subpart F – Standards for Used Oil Processors and Re-Refiners

Subpart G – Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery

Subpart H – Standards for Used Oil Fuel Marketers

*Motor pool sump shulge removed 1/yr, qty not known & put into roaster
 Ickes said no formal haz wsb deter.*

K. Universal Waste (UW)

1. Universal Waste Generated

Waste: Fluorescent & HID Lamps Batteries Hg-containing equip. and/or thermostats Pesticides *recycler equip.*

Qty. Generate/year: *1 in 10 boxes ~ 1/2 full* *1 5 gal bucket* *all Date 8/18/10*

Qty. Presently in storage: *8' 1 in 10 boxes ~ full* *with 1/2 gal*

Accumulation Time: _____

Present Disposal Method: _____

2. Person(s) responsible for universal waste management: _____

3. Does the universal waste handler accumulate (collectively) 5,000 kilograms or more at any time (40 CFR 273.9)? If YES, a large quantity handler (LQH), go on and also refer to checklist in Appendix 2-2. If NO, a small quantity handler (SQH), go on.

Assessing Requirements Common to Universal Waste SQH & LQH (40 CFR 273 Subpart B & C, respectively):

#	✓ / x	REGULATORY REQUIREMENTS*	COMMENTS
1.	✓	Disposal of UW is not occurring-273.11(a)/273.31(a)	
2.	✓	Diluting or treating universal waste is not occurring, except for responding to releases per 273.17 or by managing specific wastes per 273.13 (waste management)-273.11(b)/273.31(b)	
3.	✓	Has the LQG notified of UW management?-273.32 (a)(1) (not required for SQH)	
4.	✓	Has UW been shipped to another UW handler, a designated facility, or a foreign destination?-273.18(a)/273.38(a) If not, see Appendix 2-2 for off-site shipments	
a.		Does LQH have documentation tracking shipments?-273.39 (not required for SQH-273.19)	
5.		UW package, container, tank, vessel or transport vehicle is marked or labeled-273.14/273.34-as follows:	
a.	✓	"Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies)"-273.14(a)/273.34(a)	<i>closed</i>
b.		For recalled universal waste pesticides; "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)," and the label that was on or accompanied the product as sold or distributed, or if the label is not available or not feasible to use, the appropriate DOT label as identified in 49 CFR 172-273.14(b)/273.34(b)	
c.		For unused pesticide products as described in 40 CFR 273.3(a)(2): (1) the label that was on the product when purchased, if still legible; (2) if using that label is not feasible, the appropriate label required under DOT regulation 49 CFR Part 172; (3) if using either of the previously described labels is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and (4) the words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)"-273.14(c)/273.34(c)	
d.		"Universal Waste-Mercury Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment"-273.14(d)(1)/273.34(d)(1) <u>Thermostats may be labeled:</u> "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)"-273.14(d)(2)/273.34(d)(2)	
e.	✓	"Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)"-273.14(e)/273.34(e)	<i>closed</i>

6.	<p>Accumulation Time Limits – 273.15/273.35</p> <p>A UW handler may accumulate universal waste no longer than a year from the date of generation or receipt from another handler, unless the requirements of paragraph 273.15(b) are met, as follows:</p>	all uw containers dated 8/18/10
a.	<p>Storage over one year is solely for the purpose of accumulation of such quantities as necessary to facilitate proper recovery, treatment, or disposal <u>and</u> the handler provides proof of this – 273.15(b)/273.35(b)</p> <p>For further requirements of UW retention time documentation, see Appendix 2-2.</p>	
7.	<p>Employee Training – 273.16/273.36</p> <p>The UW handler must inform all employees who handle or have responsibility for managing universal waste of the proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.</p>	
8.	<p>Response to Releases – 273.17/273.37 – Did you observe any releases or did any releases occur? – if yes, see Appendix 2-2.</p>	
9.	<p>Handlers of universal waste that self-transport universal waste off-site become a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subpart D of this part while transporting the universal waste – 273.18(b)/273.38(b) – and see Appendix 2-2.</p>	

Appendix 1-10

EXIT BRIEFING

1. Reviewed all data collected and documented all concerns or violations? ☒ Yes ☐ No
- Location of the violation, type and amount of waste involved, time frame, frequency, specific dates & when first started occurring.
 - Illegal units-unit location (diagram/picture), dimensions, conditions, construction material, gradient of the base (for spills), other information.
 - Illegal disposal-how, when (each occurrence), where sent or disposed of, how shipped, who shipped, when shipped/disposed of, quantity.
- ☒ Identified/verified violations from previous inspection were corrected (if applicable)
- ☒ Addressed all unresolved inspection related issues
- ☒ Summarized findings and observations for the facility representatives
- NOV issued? ☒ Yes ☐ No ☐ Violations clearly identified and explained, including: circumstances, location, and applicable regulations
- ☒ Explained the importance of a timely (14 day) and adequate response
- ☒ Explained that findings and observations are based on your current knowledge of RCRA and that the final findings may differ
- ☒ Explained that compliance officer will make final compliance decisions and that all compliance questions should be directed toward them
- ☒ Explained that recommendations provided are for informational purposes only and DO NOT require specific actions by the facility
- ☒ Provided facility with CBI form
- ☒ Prepared Document Receipt form
3. Specific information requested from facility? ☐ Yes ☒ No

4. Facility appears to have awareness of RCRA regulations? ☒ Yes ☐ No

5. Facility has its own environmental staff? ☒ Yes ☐ No

6. Facility has copy of applicable regulations? ☒ Yes ☐ No

7. Attitude and demeanor of facility representative(s); ☒ OK ☐ Not OK

8. Notes/Observations:

PHOTO LOG

Facility Name / City: Climax Molybdenum Company

Fort Madison, Iowa

Facility ID #: IAD000222653

Date : September 28, 2010

Photographer: David N. Whiting

Type of Camera: Canon Power Shot G5, Serial #: 6924106034

Digital Recording Media: Flashcard

All digital photos were copied by: David N. Whiting on 10/15/10

All digital photos were copied to: CD-R

Original copy is stored in: CD-R. Digital photos were downloaded to CD-R by David N. Whiting. No changes were made in the original image files prior to storage on the CD-R.

Report Photo #	Photographer	Date	Approx. Time	File Name (IMG_XXX.jpg)	Description
1	David N. Whiting	09/28/10	3:40 pm	0836.jpg	Motor pool sump pit.
2	David N. Whiting	09/28/10	3:40 pm	0837.jpg	Overflow pipe in sump pit is not marked "used oil."

Photo 1

Motor pool sump pit.



Photo 2

Overflow pipe in sump pit is not marked "used oil."

DOCUMENT CONTROL CHECK SHEET

Media:

Air RCRA Water Other

1 8 1 1

Date of Inspection: 9/28-29/10

Facility/Site Name and Location:

Climax Molybdenum Co.
Fort Madison

IA KS MONE

1 1 1 1

Document

Yes No NA

Final Report w/attachments

74 Pages

(✓) () ()

Field Sheets

 Pages

() () (✓)

Chain-of-Custody Records

 Pages

() () (✓)

Field Notes

 Pages

() () (✓)

Analytical Data Sheets

 Pages

() () (✓)

Photographic Negatives

 Pages

() () (✓)

Photographs (not included w/report)

 Pages

() () (✓)

Pre-inspection Packet

 Pages

() () (✓)

Other Documents (list below)

(✓) () ()

inspector worksheet

2 Pages

CD with photos from CEI

1 CD
Pages

 Pages

(Note: If additional space is needed to list specific documents, use the reverse side of this page.)

CERTIFICATION

I, the undersigned, certify that all of the documents pertaining to this activity that were in my possession have been listed above and were included in this package at the time this statement was signed.

David M. White
Activity Leader's Signature

10/21/10
Date Signed



